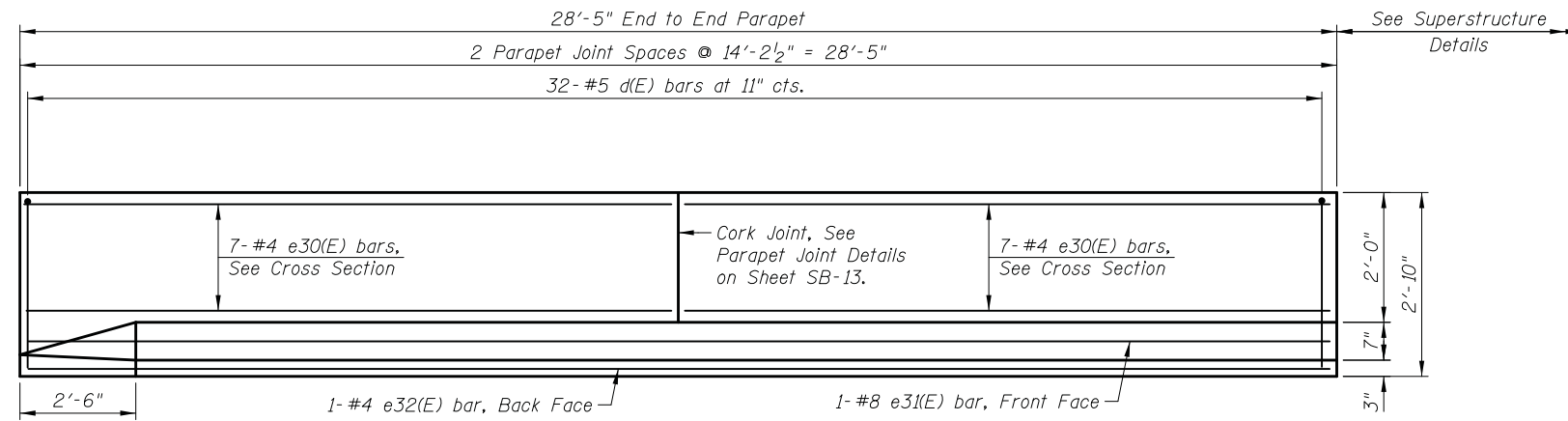
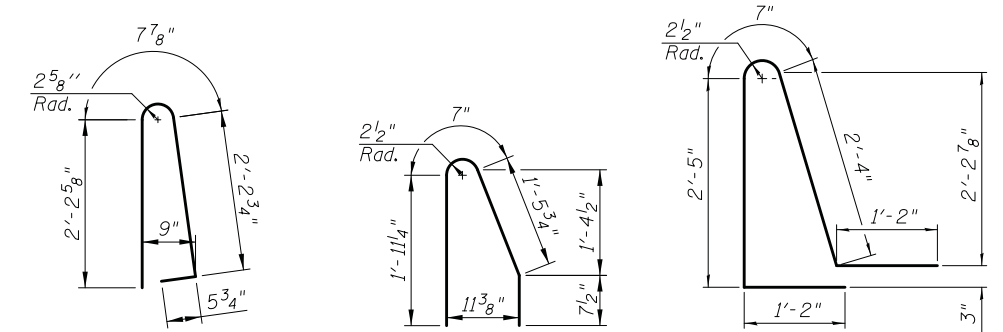


Notes:

1. Parapet concrete shall be paid for as Concrete Superstructure.
2. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
3. Approach footing concrete shall be paid for as Concrete Structures.
4. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
5. Cost of excavation for approach footing included with Concrete Structures.
6. For Granular Backfill for Structures and drainage treatment details, see sheet SB-2.



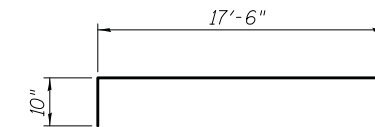
INSIDE ELEVATION OF NORTHWEST & SOUTHEAST PARAPET



BAR d(E)

BAR d2(E)

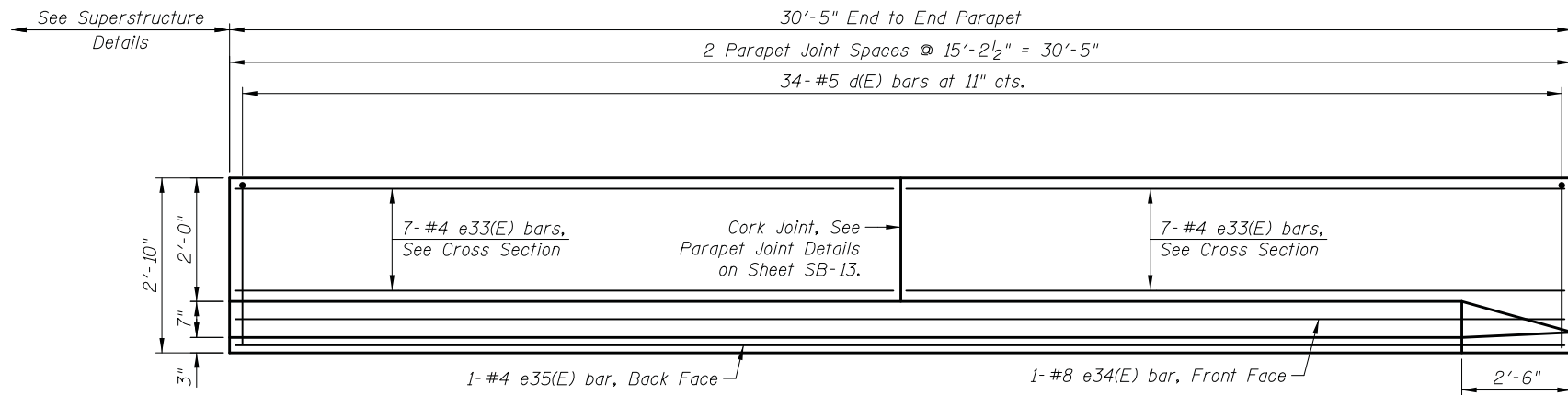
BAR d10(E)



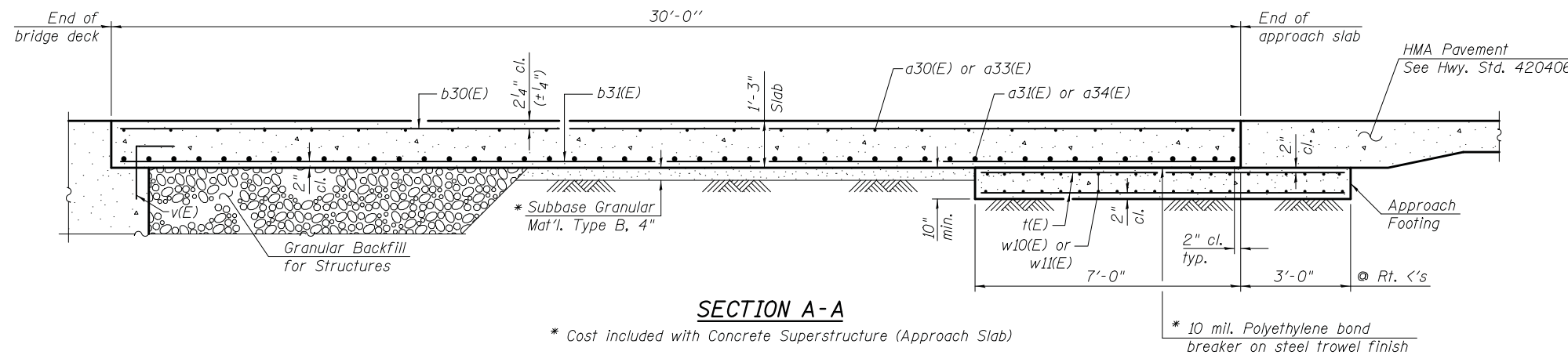
BAR a35(E)

**TWO APPROACHES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a30(E)	192	#5	17'-0"	—
a31(E)	172	#8	25'-0"	—
a32(E)	64	#5	6'-6"	—
a33(E)	64	#5	32'-2"	—
a34(E)	86	#8	32'-3"	—
a35(E)	64	#5	18'-4"	—
b30(E)	166	#5	29'-8"	—
b31(E)	260	#9	29'-8"	—
d(E)	132	#5	5'-7"	⤴
d2(E)	66	#5	4'-8"	⤴
d10(E)	66	#5	7'-8"	⤴
e30(E)	28	#4	13'-11"	—
e31(E)	2	#8	28'-1"	—
e32(E)	2	#4	28'-1"	—
e33(E)	28	#4	14'-11"	—
e34(E)	2	#8	30'-1"	—
e35(E)	2	#4	30'-1"	—
t(E)	224	#4	13'-10"	—
w10(E)	160	#5	23'-5"	—
w11(E)	160	#5	17'-9"	—
Concrete Structures			Cu. Yd.	69.1
Concrete Superstructure			Cu. Yd.	14.0
Bridge Deck Grooving			Sq. Yd.	254
Protective Coat			Sq. Yd.	411
Concrete Superstructure (Approach Slab)			Cu. Yd.	150.7
Reinforcement Bars, Epoxy Coated			Pound	68,950



INSIDE ELEVATION OF NORTHEAST & SOUTHWEST PARAPET

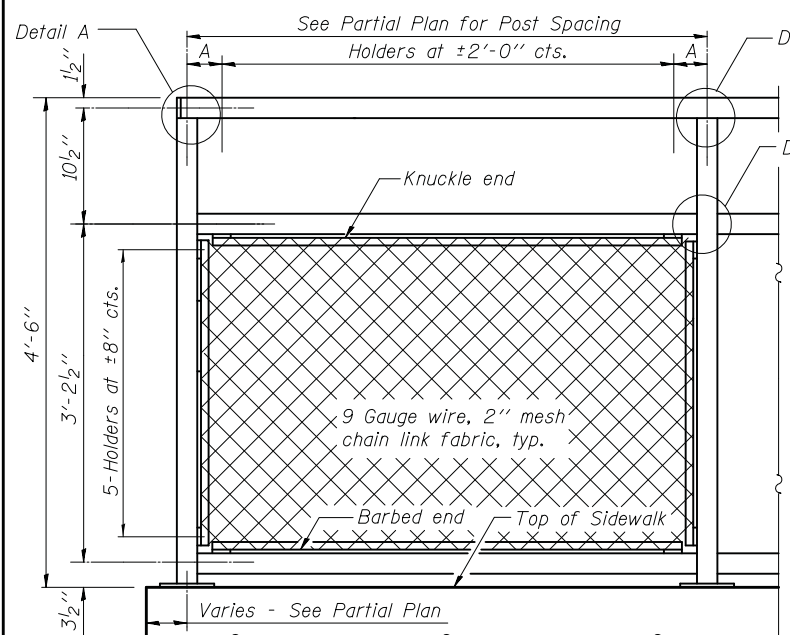


SECTION A-A

* Cost included with Concrete Superstructure (Approach Slab)

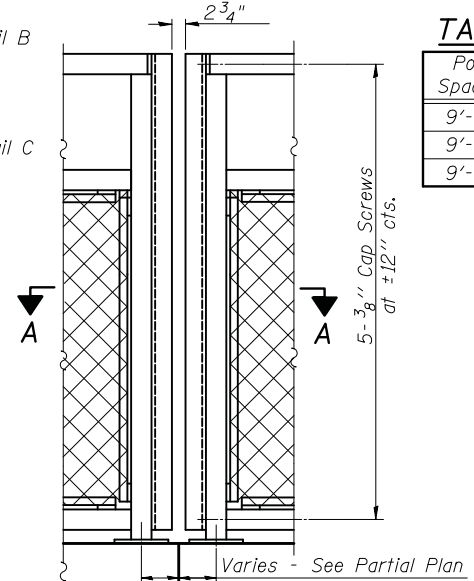
* 10 mil. Polyethylene bond breaker on steel trowel finish

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BICYCLE RAILING

Note: See Table 1 for dimension "A".

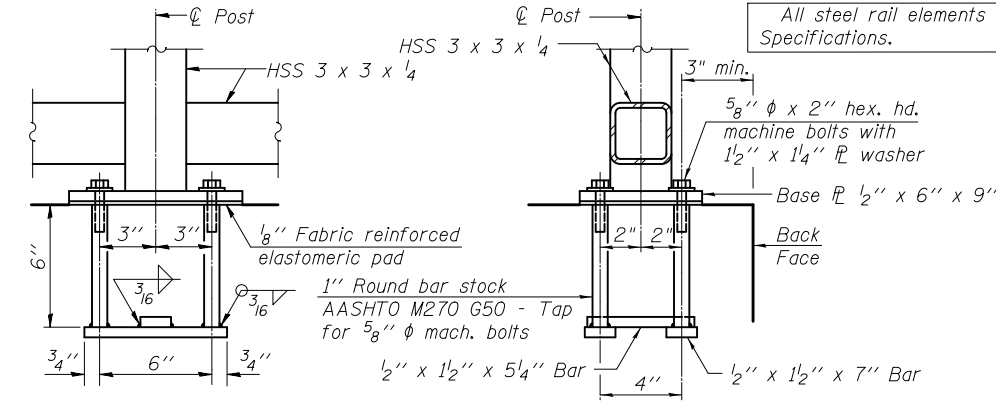


BICYCLE RAILING

Elevation at joint between bridge deck and approach slab

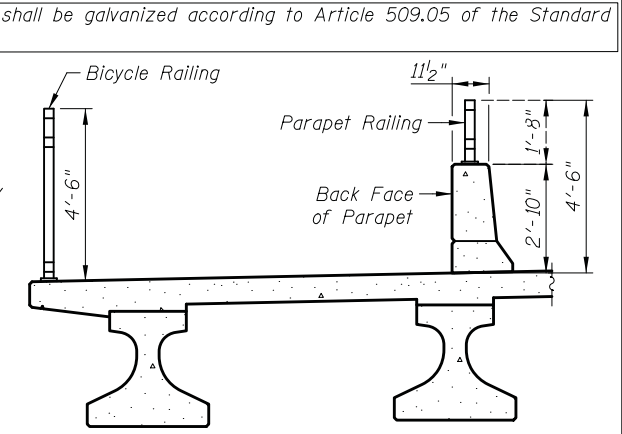
TABLE 1

Post Spacing	"A"
9'-5"	8 1/2"
9'-3"	7 1/2"
9'-6"	9"



ANCHOR BOLT DETAILS

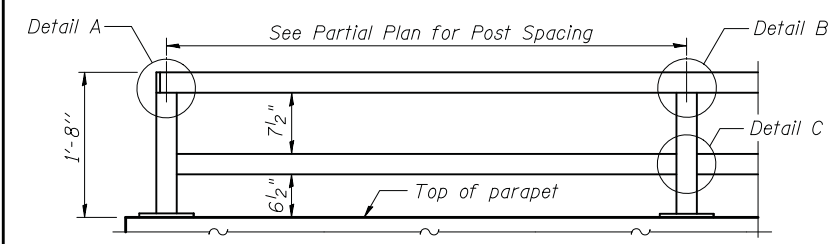
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" φ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



SECTION THRU DECK

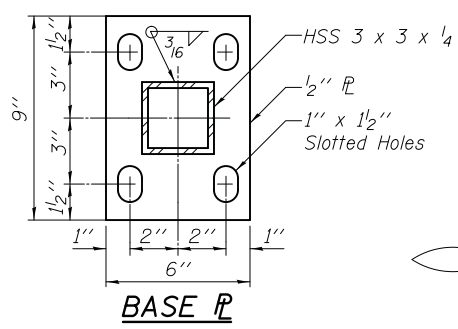
Notes:

- All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.34(b) of the Standard Specifications.
- CVN testing may be omitted for the Bicycle Railing.

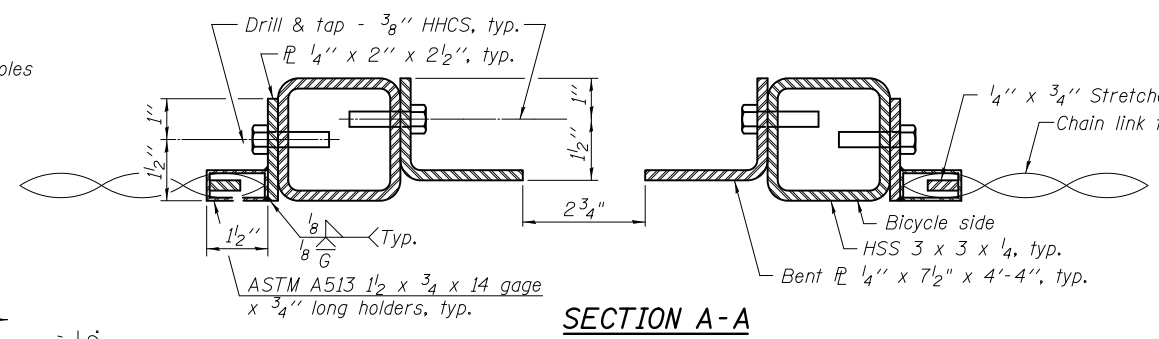
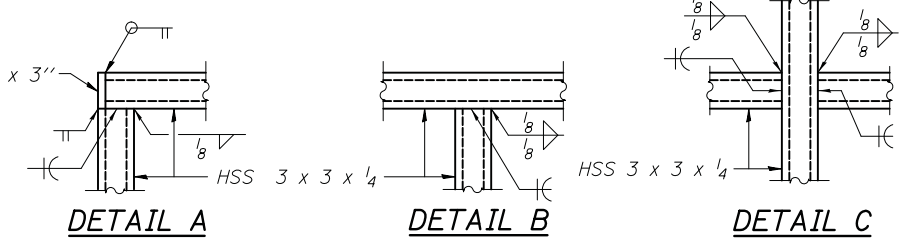


PARAPET RAILING ELEVATION

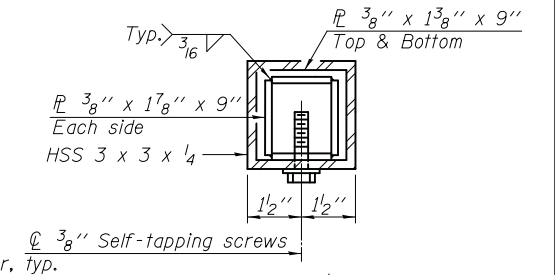
(Inside Face of Two Element Rail)



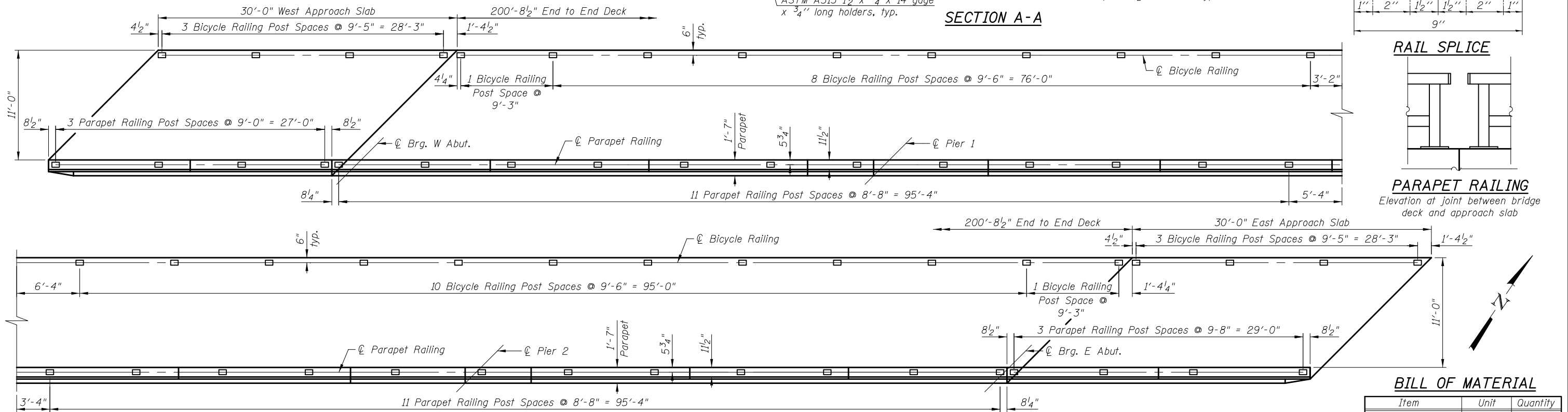
BASE PLATE



SECTION A-A



RAIL SPLICE



PARTIAL PLAN - NORTH PARAPET & BIKE PATH

PARAPET RAILING
Elevation at joint between bridge deck and approach slab

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing	Foot	260
Parapet Railing	Foot	260

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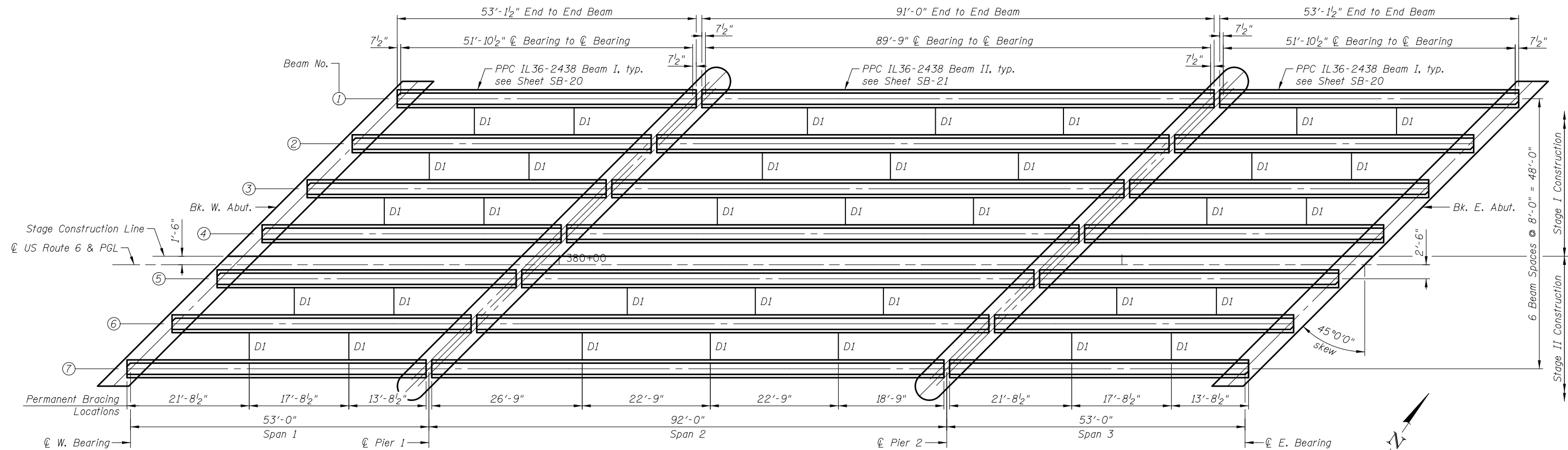
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DESIGNED	- E. VAYSMAN	REVISED	-
CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 1/30/2019	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAILING DETAILS
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543
 SHEET NO. SB-18 OF SB-35 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	202
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				



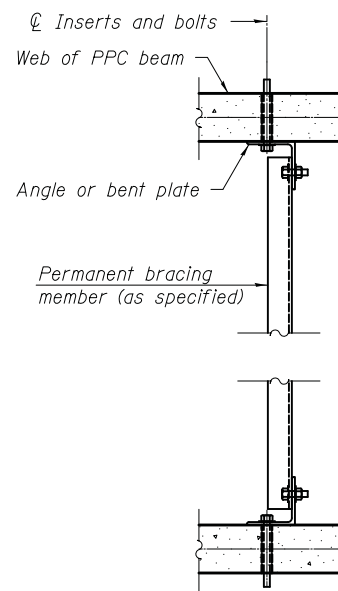
FRAMING PLAN

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 0.6 Sp. 3	Pier 1 or 2	0.5 Sp. 2
<i>I</i>	(in ⁴)	100,433	-	100,433
<i>I'</i>	(in ⁴)	298,886	-	298,886
<i>S_b</i>	(in ³)	6,832	-	6,832
<i>S_b'</i>	(in ³)	11,803	-	11,803
<i>S_t</i>	(in ³)	4,715	-	4,715
<i>S_t'</i>	(in ³)	27,991	-	27,991
<i>DC1</i>	(k/ft)	1.609	-	1.609
<i>M_{DC1}</i>	(k)	542	-	1,702
<i>DC2</i>	(k/ft)	0.143	0.143	0.143
<i>M_{DC2}</i>	(k)	13	87	65
<i>DW</i>	(k/ft)	0.400	0.400	0.400
<i>M_{DW}</i>	(k)	38	243	180
<i>M_Σ + IM</i>	(k)	714.0	985.1	975.4

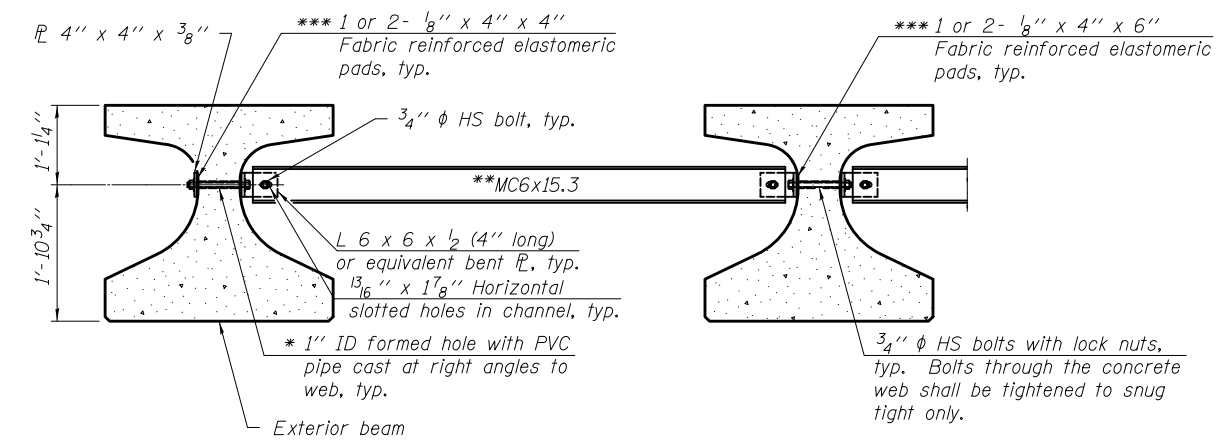
INTERIOR BEAM REACTION TABLE				
		Abutment	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
<i>R_{DC1}</i>	(k)	42.6	42.6	74.0
* <i>R_{DC2}</i>	(k)	2.2	6.0	6.0
* <i>R_{DW}</i>	(k)	6.0	16.8	16.8
* <i>R_Σ + IM</i>	(k)	87.4	68.8	68.8
<i>R_{Total}</i>	(k)	138.2	134.2	165.6

* At continuous piers, reactions from composite loads are assumed to be equally distributed to each bearing line.

I: Non-composite moment of inertia of beam section (in⁴).
I': Composite moment of inertia of beam section (in⁴).
S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
S_b': Composite section modulus for the bottom fiber of the prestressed beam (in³).
S_t: Non-composite section modulus for the top fiber of the prestressed beam (in³).
S_t': Composite section modulus for the top fiber of the prestressed beam (in³).
DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
M_Σ + IM: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).



PLAN



Notes:

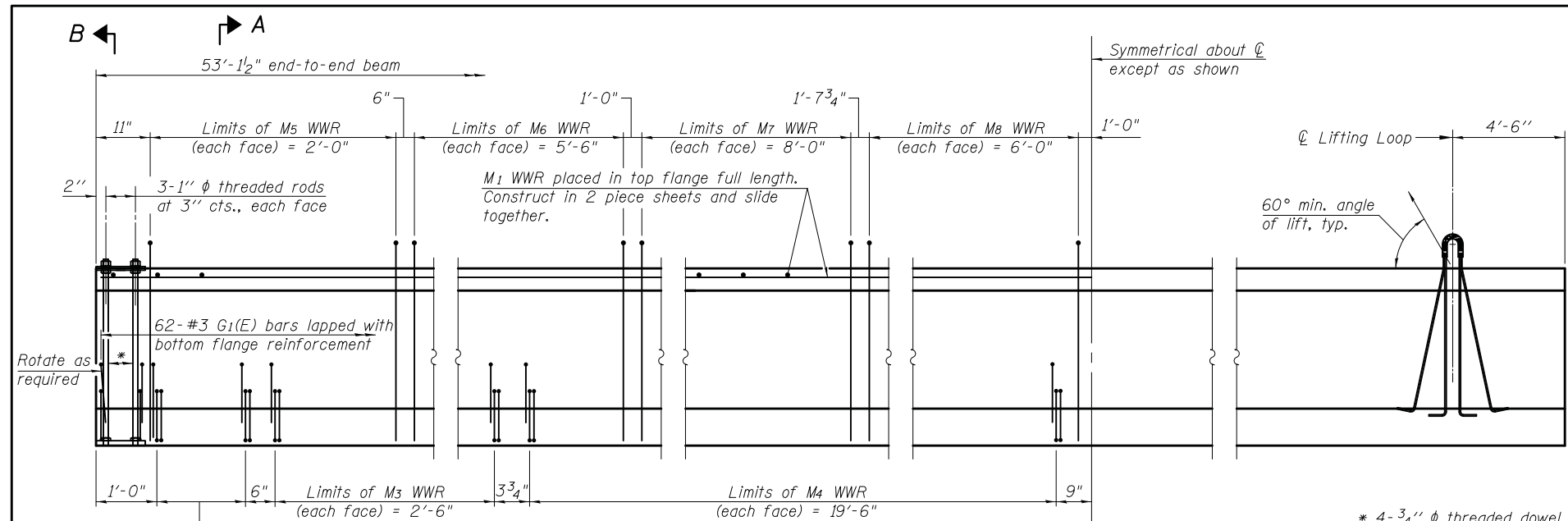
- All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
- Two hardened washers are required for each set of oversized holes.
- All holes shall be 15/16" φ unless otherwise noted.
- 5/16" x 3" x 3" plate washers are required over all slotted holes.
- All bolts shall be galvanized according to AASHTO M232.
- Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
- Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams.

- * Fabricator shall locate to miss strands within permissible tolerances.
- ** Alternate MC6x18 channels are permitted to facilitate material acquisition.
- *** Place pads as necessary to provide a flat mounting surface between the steel and concrete.

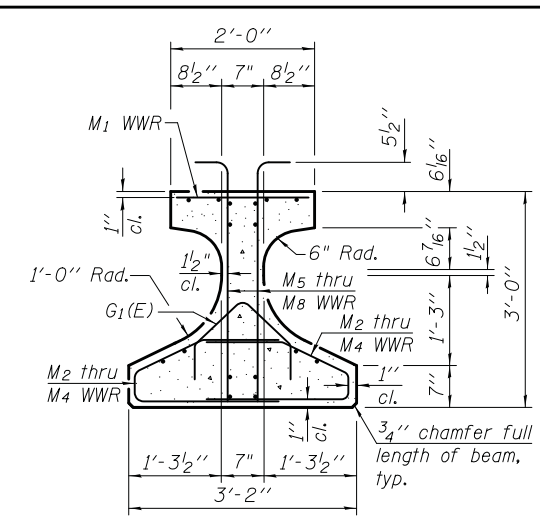
D1 PERMANENT BRACING DETAILS

(35 Required)

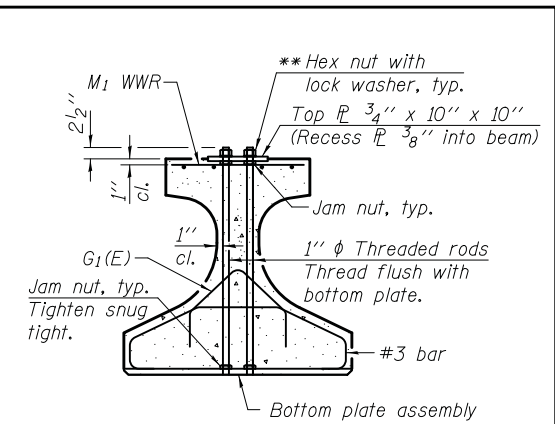
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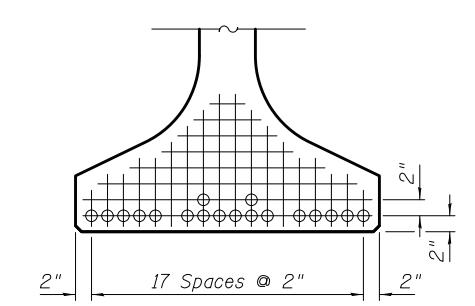
ELEVATION OF BEAM
Spans 1 & 3
(Showing reinforcement & dimensions)



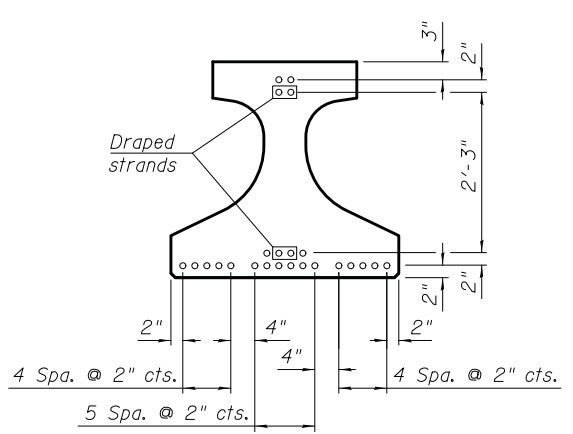
SECTION A-A



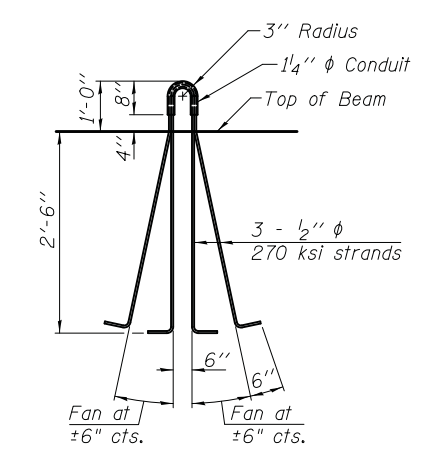
SECTION B-B



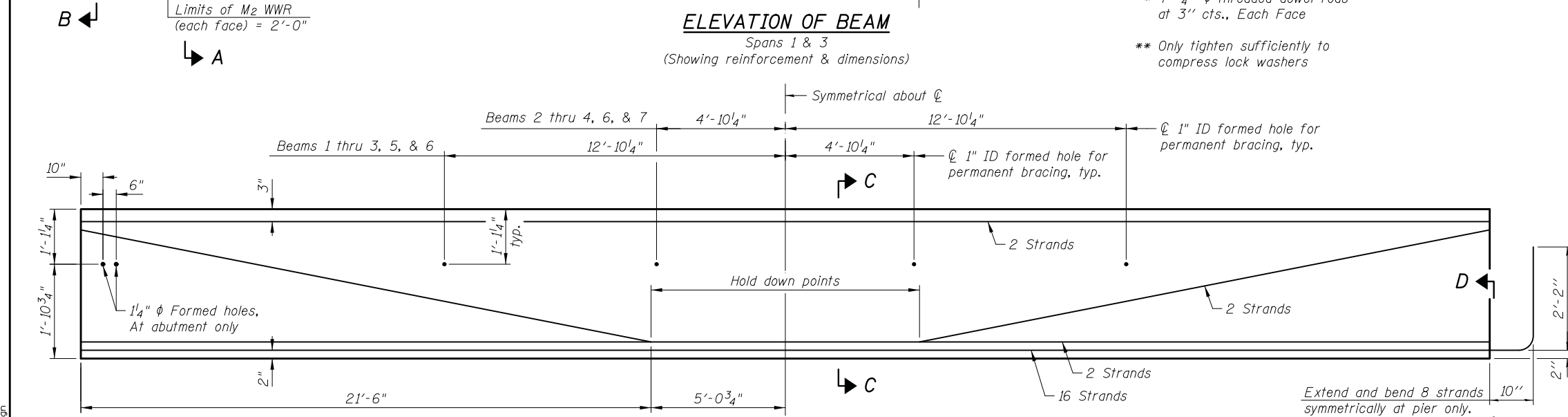
VIEW D-D



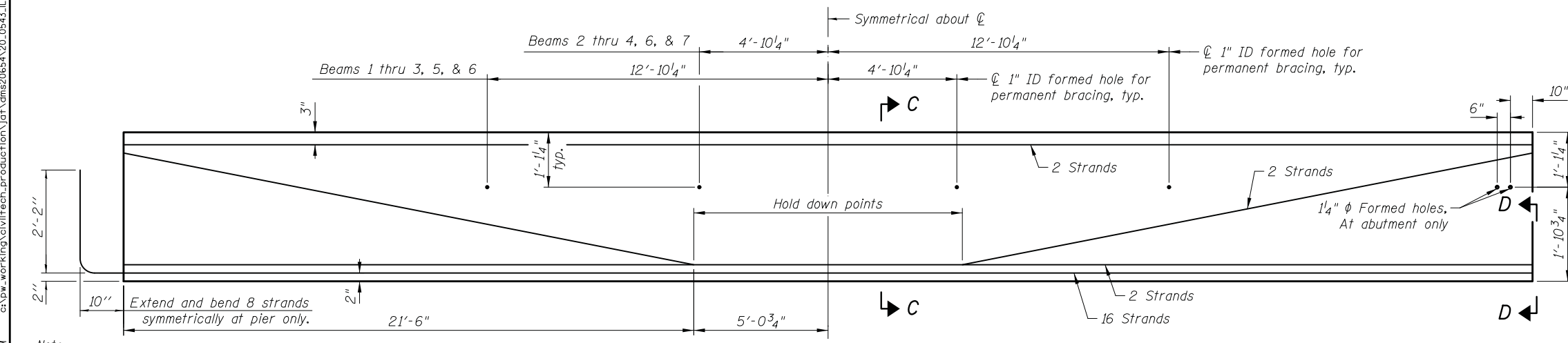
SECTION C-C
(22-0.6" φ 270 ksi strands)



LIFTING LOOP DETAIL



ELEVATION OF BEAM - SPAN 1
(Showing prestressing steel)



ELEVATION OF BEAM - SPAN 3
(Showing prestressing steel)

Note:
1. See sheet SB-22 for additional details and Bill of Material.
2. See Sheet SB-14 for Top Flange Clip Detail at abutments.

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CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 1/30/2019	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL36N BEAM I
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543

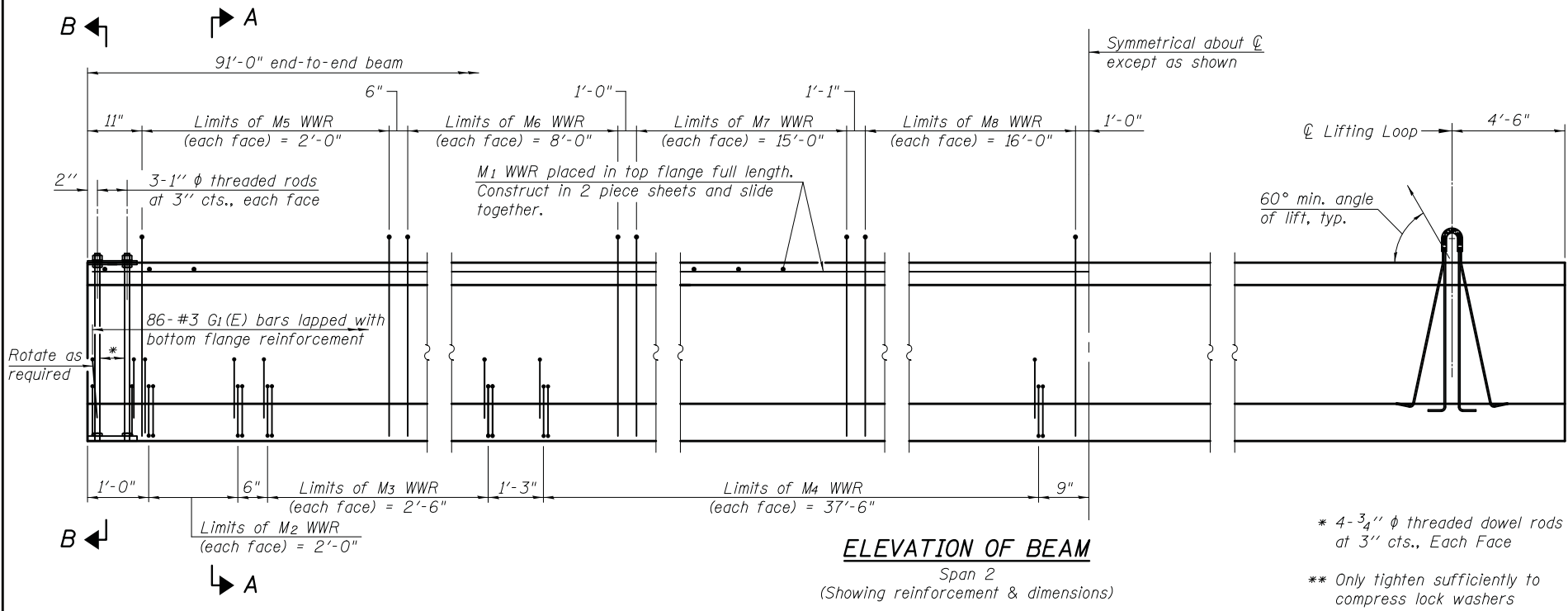
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	204
CONTRACT NO. 60R52				

SHEET NO. SB-20 OF SB-35 SHEETS

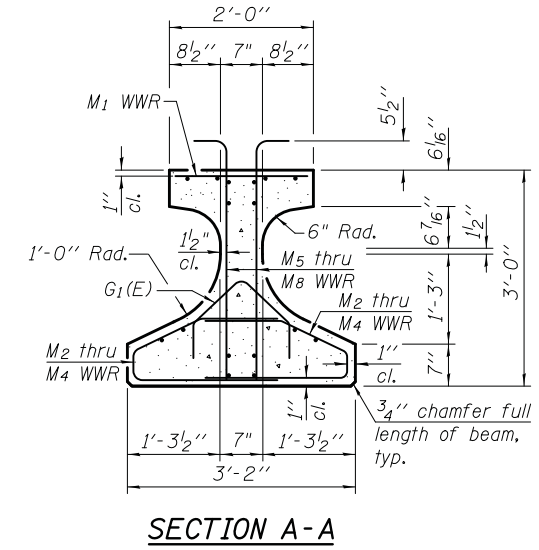
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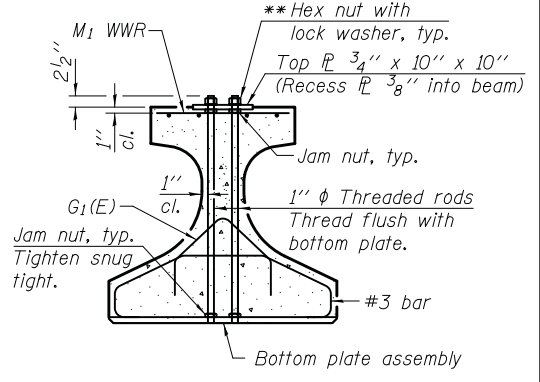
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ELEVATION OF BEAM
Span 2
(Showing reinforcement & dimensions)

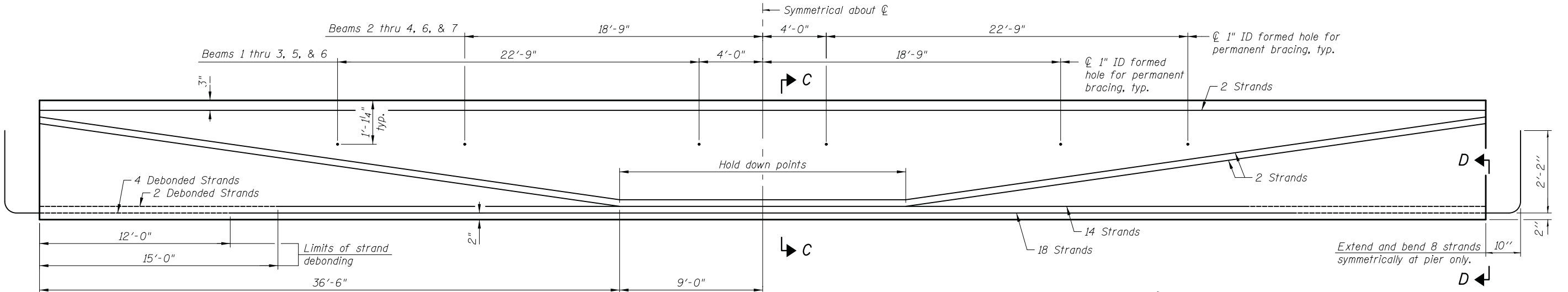


SECTION A-A

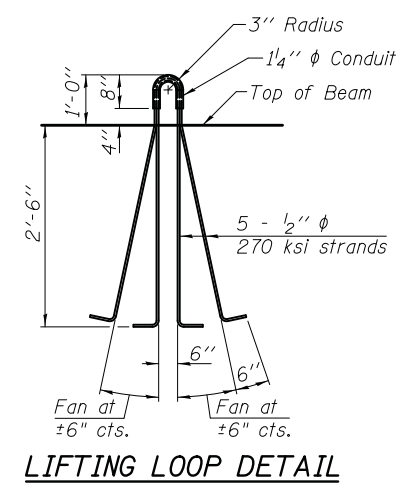


SECTION B-B

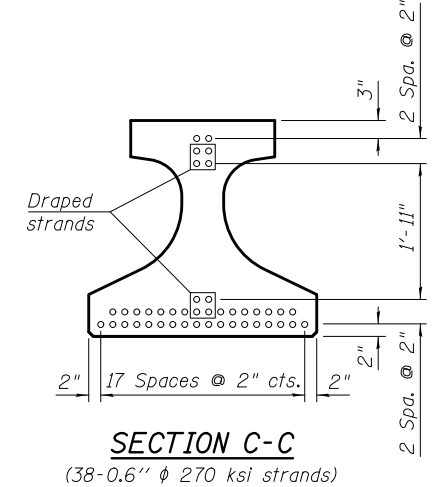
* 4-3/4" ϕ threaded dowel rods at 3" cts., Each Face
** Only tighten sufficiently to compress lock washers



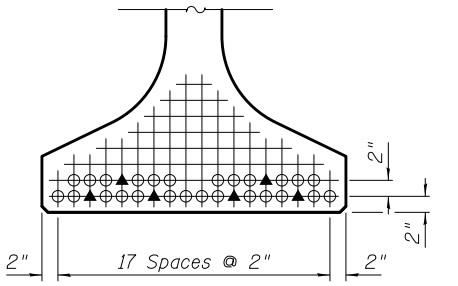
ELEVATION OF BEAM
Span 2
(Showing prestressing steel)



LIFTING LOOP DETAIL



SECTION C-C
(38-0.6" ϕ 270 ksi strands)



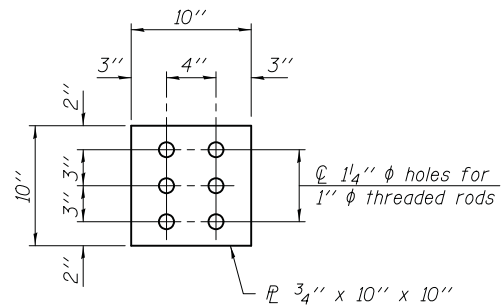
VIEW D-D

○ Fully bonded strand
▲ Partially debonded strand

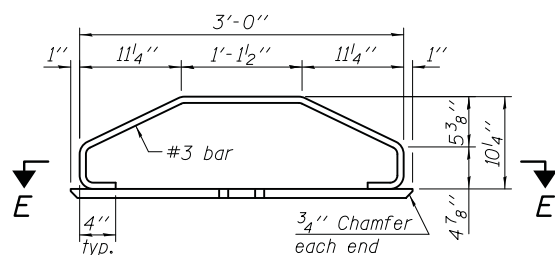
Note:
1. See sheet SB-22 for additional details and Bill of Material.

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DATE	- 1/30/2019	REVISED	-

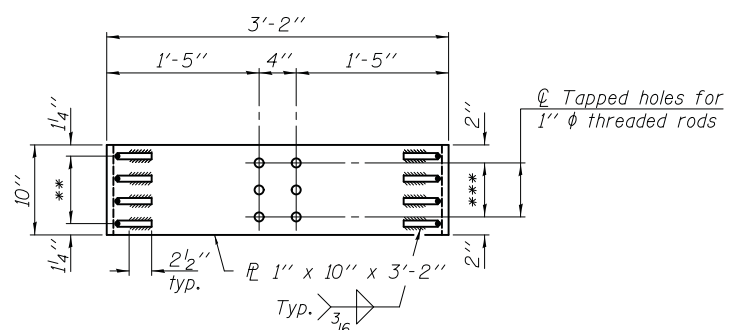
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	205
CONTRACT NO. 60R52				



PLAN - TOP PLATE



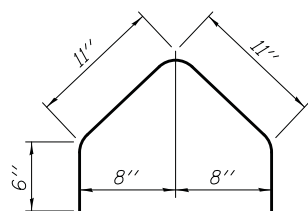
ELEVATION - BOTTOM PLATE ASSEMBLY



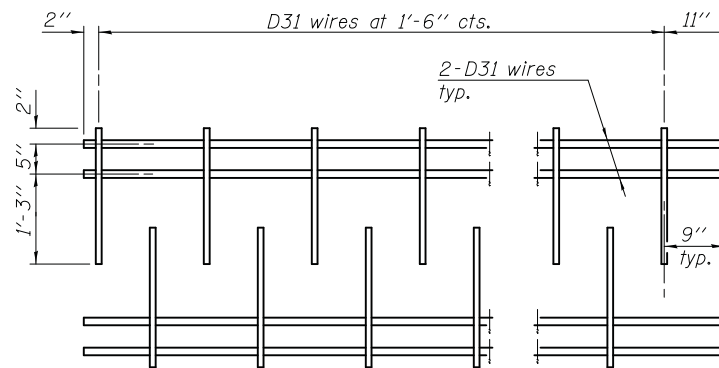
SECTION E-E

** 3 Spaces at 2 1/2" = 7 1/2"

*** 2 Spaces at 3" = 6"

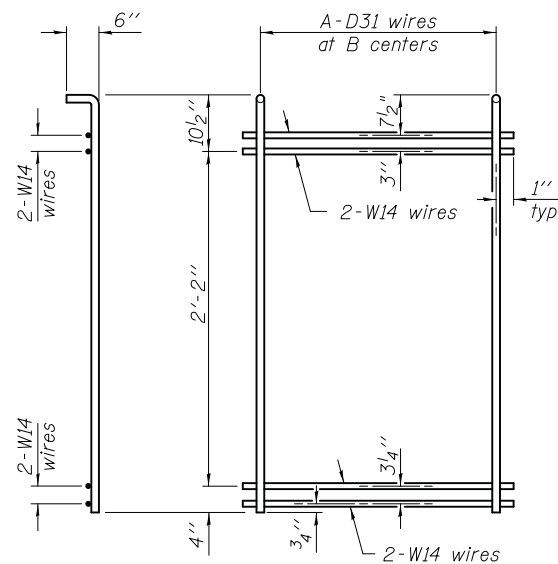


BAR G1(E)



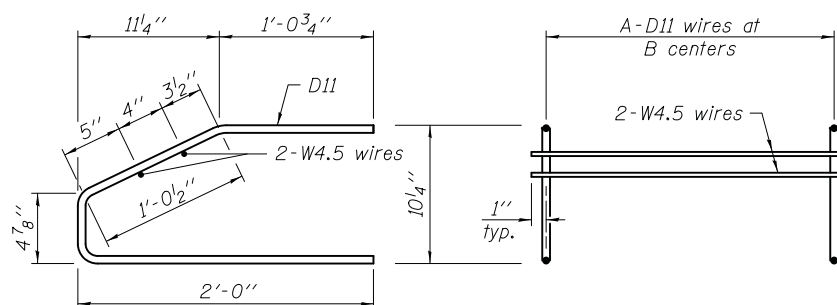
M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").



M5 THRU M8 WWR DETAIL

(See Table of Dimensions)



M2 THRU M4 WWR DETAIL

(See Table of Dimensions)

Notes:

1. Inserts for 3/4" ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.
2. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be 1/2" and the nominal cross sectional area shall be 0.153 sq. in.
3. The beams shall have a final concrete compressive strength, $f'c$, of 8500 psi and a release concrete compressive strength, $f'ci$, of 7000 psi.
4. A minimum 2 1/2" ϕ lifting pin shall be used to engage the lifting loops during handling.
5. Bend the extended strands inward on the fascia beams to maintain 1/2" clearance inside the pier diaphragm.
6. The top and bottom plates shall be AASHTO M270 Grade 50.
7. The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111. The threaded rods, nuts and washers shall be galvanized according to AASHTO M232.
8. Threaded rods shall be ASTM F 1554 Grade 55.
9. Beams shall not be released from the fabricator until they have attained 45 days of age or older.
10. Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating.

TABLE OF DIMENSIONS

SPANS 1 & 3

WWR	A	B
M2	9	3"
M3	6	6"
M4	14	1'-6"
M5	9	3"
M6	12	6"
M7	9	1'-0"
M8	4	2'-0"

SPAN 2

WWR	A	B
M2	9	3"
M3	6	6"
M4	26	1'-6"
M5	9	3"
M6	17	6"
M7	16	1'-0"
M8	9	2'-0"

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL36N	Ft.	1,381

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IL36-2438D 2-17-2017



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DATE - 1/30/2019

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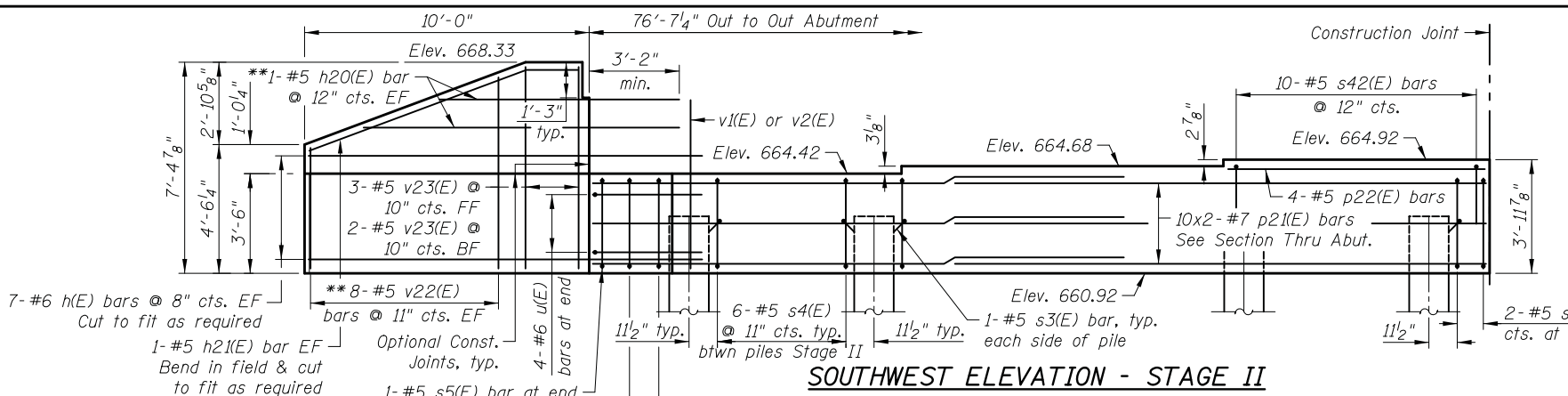
IL36N BEAM DETAILS
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543

SHEET NO. SB-22 OF SB-35 SHEETS

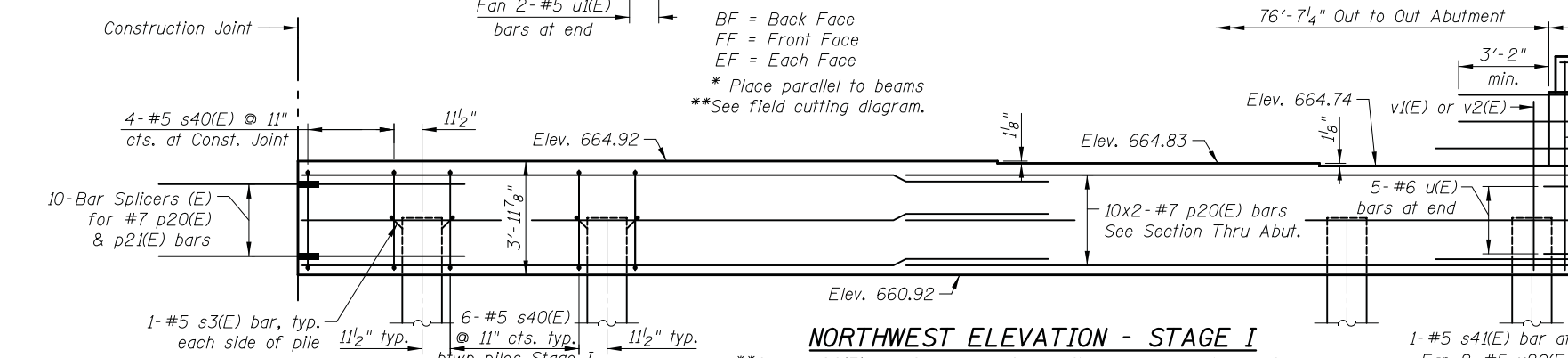
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	206
CONTRACT NO. 60R52				

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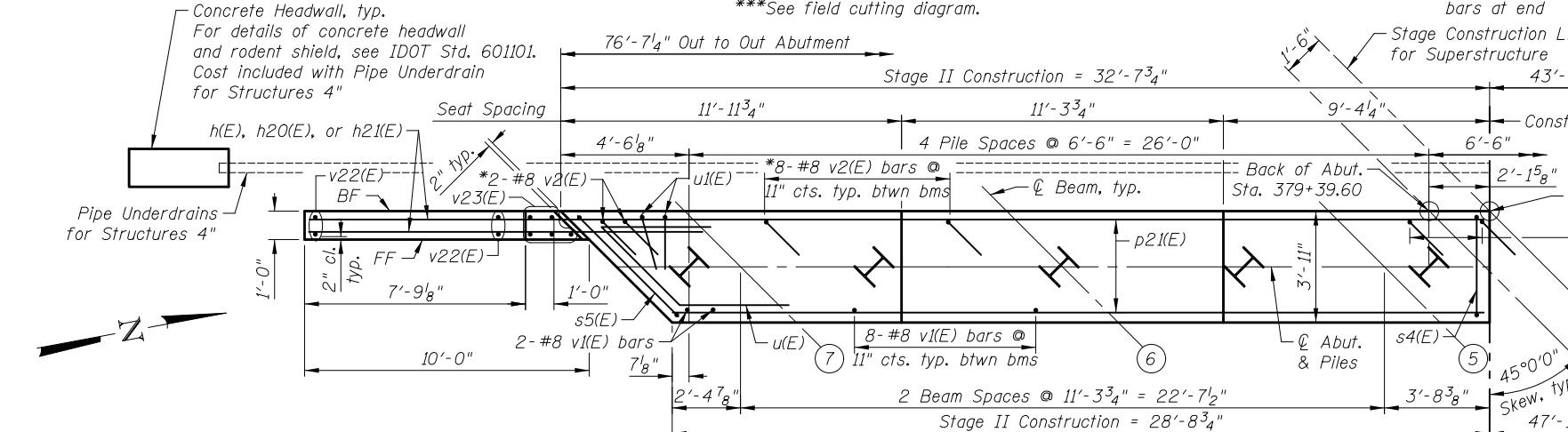
5/18/2019
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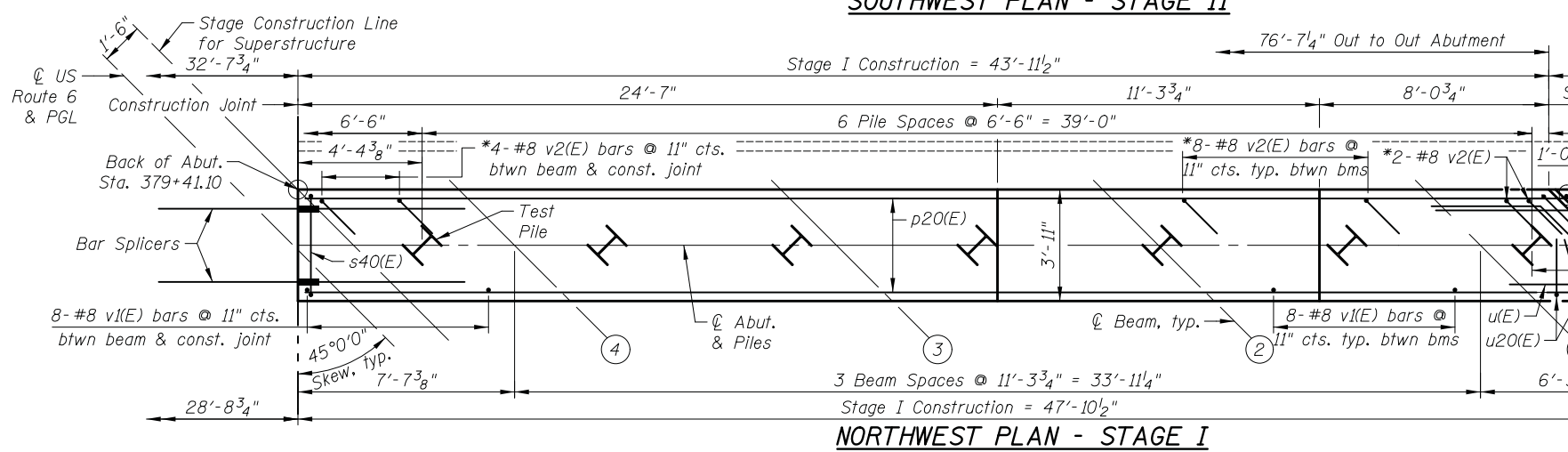
SOUTHWEST ELEVATION - STAGE II



NORTHWEST ELEVATION - STAGE I



SOUTHWEST PLAN - STAGE II

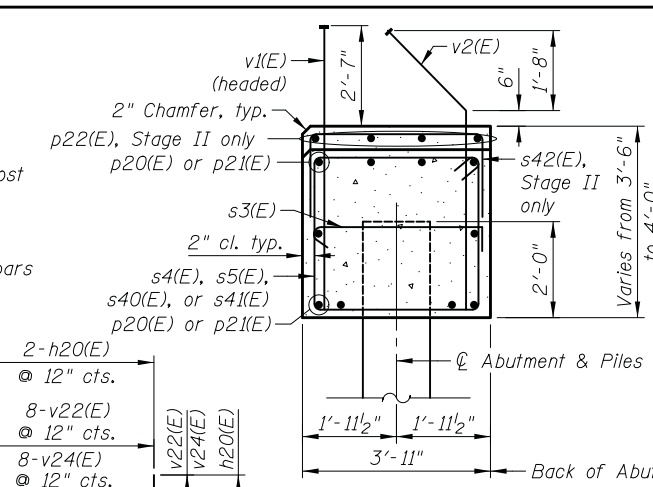


NORTHWEST PLAN - STAGE I

- Notes:**
- For Diaphragm Details, see sheet SB-14.
 - For Pile Details, see sheet SB-29.
 - For Bar Splicers, see sheet SB-30.
 - Headed bars shall conform to ASTM A970 Class HA. Cost included with Reinforcement Bars, Epoxy Coated.
 - Pour steps monolithically with cap.
 - Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths.

PILE DATA

Type: HP12x53 with pile shoes
 Nominal Required Bearing: 418 k
 Factored Resistance Available: 209 k
 Est. Length: 50 ft.
 No. Production Piles: 11
 No. Test Piles: 1



SECTION THRU ABUTMENT
 Dimensions at right angles to abutment

MINIMUM LAP
 #7 bar = 5'-0"

FIELD CUTTING DIAGRAM

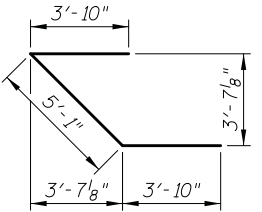
Order h20(E), v22(E) & v24(E) bars full length. Cut as shown and use remainder of bars in opposite face.

BILL OF MATERIAL
 (West Abutment)

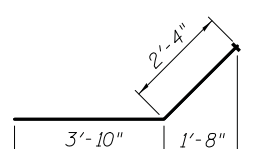
Bar	No.	Size	Length	Shape
h(E)	28	#6	13'-2"	—
h20(E)	4	#5	19'-7"	—
h21(E)	4	#5	9'-11"	—
p20(E)	20	#7	26'-3"	—
p21(E)	20	#7	18'-8"	—
p22(E)	4	#5	9'-0"	—
s3(E)	24	#5	4'-7"	⌋
s4(E)	26	#5	14'-5"	⌋
s5(E)	1	#5	17'-5"	⌋
s40(E)	40	#5	15'-1"	⌋
s41(E)	1	#5	18'-1"	⌋
s42(E)	10	#5	6'-11"	⌋
u(E)	9	#6	12'-9"	⌋
u1(E)	2	#5	7'-2"	⌋
u20(E)	2	#5	7'-6"	⌋
v1(E)	52	#8	5'-11"	—
v2(E)	52	#8	6'-2"	—
v22(E)	8	#5	11'-0"	—
v23(E)	5	#5	7'-1"	—
v24(E)	8	#5	11'-6"	—
v25(E)	5	#5	7'-4"	—
Structure Excavation	Cu. Yd.		62	
Concrete Structures	Cu. Yd.		47.4	
Reinforcement Bars, Epoxy Coated	Pound		5,940	
Furnishing Steel Piles HP12x53	Foot		550	
Driving Piles	Foot		550	
Test Pile Steel HP12x53	Each		1	
Pile Shoes	Each		12	
Granular Backfill for Structures	Cu. Yd.		121	
Geocomposite Wall Drain	Sq. Yd.		69	
Pipe Underdrains for Structures 4"	Foot		102	

BARS s4(E), s5(E), s40(E), & s41(E)

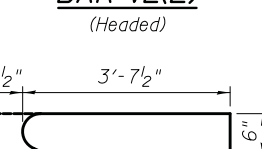
Bar	A	B
s4(E)	3'-2"	3'-7"
s5(E)	3'-2"	5'-1"
s40(E)	3'-6"	3'-7"
s41(E)	3'-6"	5'-1"



BAR u(E)



BAR v2(E)
(Headed)



BAR s3(E)



BARS s42(E), u1(E), & u20(E)

Bar	A	B
s42(E)	1'-8"	3'-7"
u1(E)	2'-0"	3'-2"
u20(E)	2'-0"	3'-6"

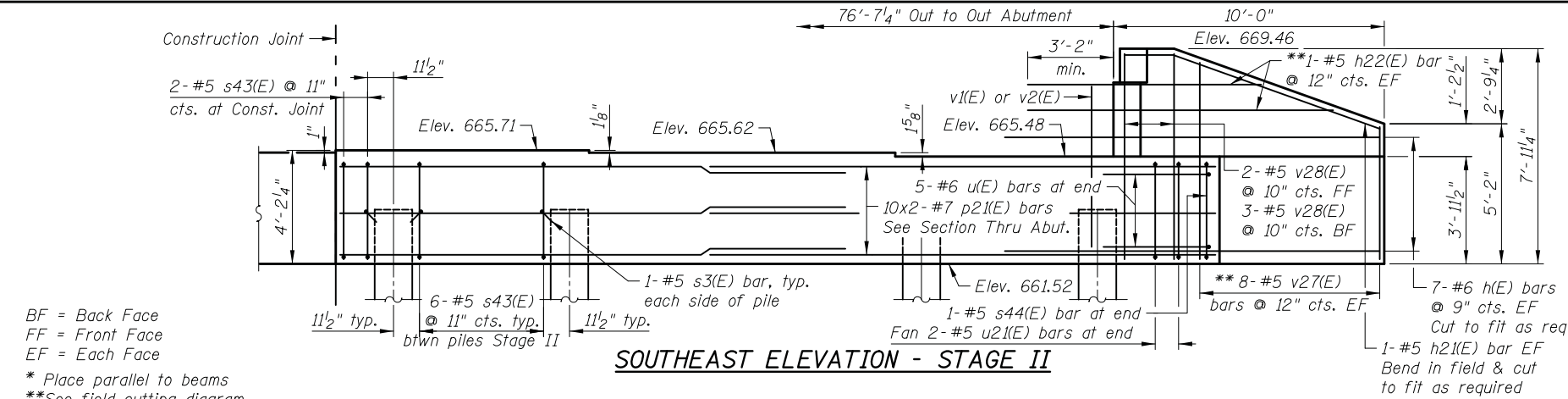
CIVILTECH
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DRAWN - E. VAYSMAN	REVISED -
DESIGNED - E. VAYSMAN	REVISED -
CHECKED - G. HATLESTAD	REVISED -
DATE - 1/30/2019	REVISED -

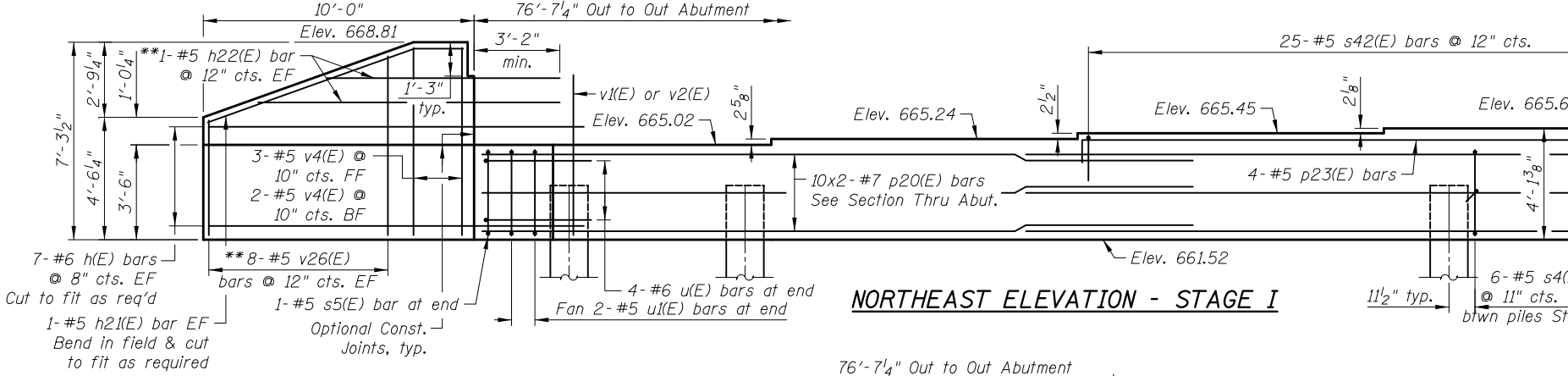
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543
 SHEET NO. SB-23 OF SB-35 SHEETS

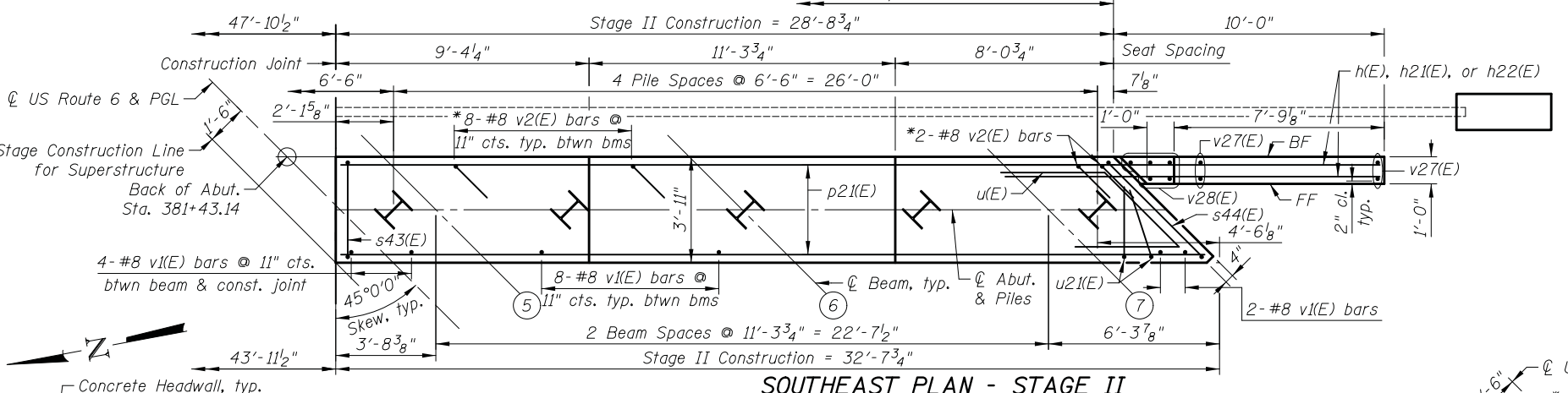
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	207
CONTRACT NO. 60R52			ILLINOIS FED. AID PROJECT	



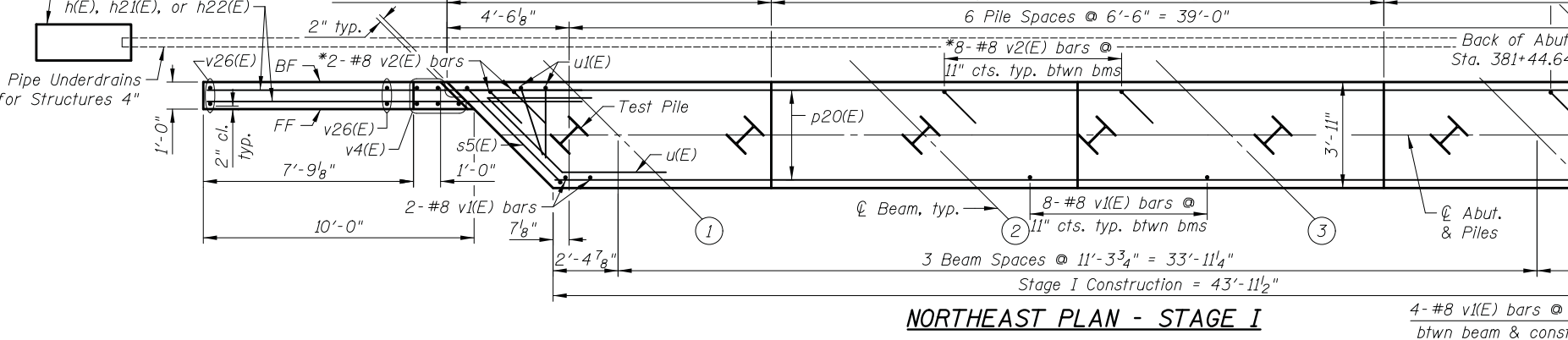
BF = Back Face
FF = Front Face
EF = Each Face
* Place parallel to beams
** See field cutting diagram.



7-#6 h(E) bars @ 8" cts. EF
Cut to fit as req'd
1-#5 h21(E) bar EF
Bend in field & cut to fit as required



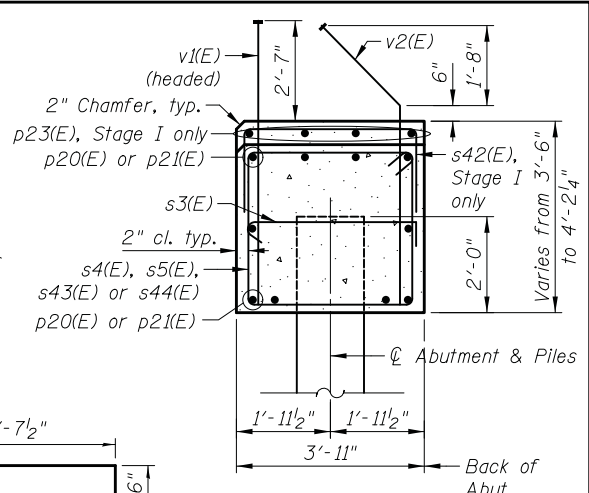
Concrete Headwall, typ.
For details of concrete headwall and rodent shield, see IDOT Std. 601101.
Cost included with Pipe Underdrain for Structures 4".



Pipe Underdrains for Structures 4"
Test Pile

- Notes:
- For Diaphragm Details, see sheet SB-14.
 - For Pile Details, see sheet SB-29.
 - For Bar Splicers, see sheet SB-30.
 - Headed bars shall conform to ASTM A970 Class HA. Cost included with Reinforcement Bars, Epoxy Coated.
 - Pour steps monolithically with cap.
 - Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths.

PILE DATA
Type: HP12x53 with pile shoes
Nominal Required Bearing: 418 k
Factored Resistance Available: 215 k
Est. Length: 43 ft.
No. Production Piles: 11
No. Test Piles: 1

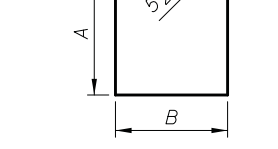


SECTION THRU ABUTMENT
Dimensions at right angles to abutment

MINIMUM LAP
#7 bar = 5'-0"

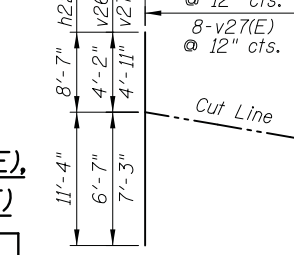
BILL OF MATERIAL
(East Abutment)

Bar	No.	Size	Length	Shape
h(E)	28	#6	13'-2"	—
h21(E)	4	#5	9'-11"	—
h22(E)	4	#5	19'-11"	—
p20(E)	20	#7	26'-3"	—
p21(E)	20	#7	18'-8"	—
p23(E)	4	#5	24'-3"	—
s3(E)	24	#5	4'-7"	⌋
s4(E)	40	#5	14'-5"	⌋
s5(E)	1	#5	17'-5"	⌋
s42(E)	25	#5	6'-11"	⌋
s43(E)	26	#5	15'-3"	⌋
s44(E)	1	#5	18'-3"	⌋
u(E)	9	#6	12'-9"	⌋
u1(E)	2	#5	7'-2"	⌋
u21(E)	2	#5	7'-7"	⌋
v1(E)	52	#8	5'-11"	—
v2(E)	52	#8	6'-2"	—
v4(E)	5	#5	7'-0"	—
v26(E)	8	#5	10'-9"	—
v27(E)	8	#5	12'-2"	—
v28(E)	5	#5	7'-7"	—
Structure Excavation			Cu. Yd.	52
Concrete Structures			Cu. Yd.	48.3
Reinforcement Bars, Epoxy Coated			Pound	6,120
Furnishing Steel Piles HP12x53			Foot	473
Driving Piles			Foot	473
Test Pile Steel HP12x53			Each	1
Pile Shoes			Each	12
Granular Backfill for Structures			Cu. Yd.	124
Geocomposite Wall Drain for Structures 4"			Sq. Yd.	70
Pipe Underdrains for Structures 4"			Foot	102

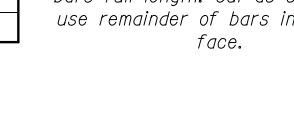


BARS s4(E), s5(E), s43(E), & s44(E)

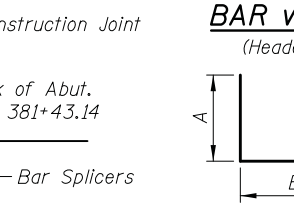
Bar	A	B
s4(E)	3'-2"	3'-7"
s5(E)	3'-2"	5'-1"
s43(E)	3'-7"	3'-7"
s44(E)	3'-7"	5'-1"



FIELD CUTTING DIAGRAM
Order h22(E), v26(E) & v27(E) bars full length. Cut as shown and use remainder of bars in opposite face.



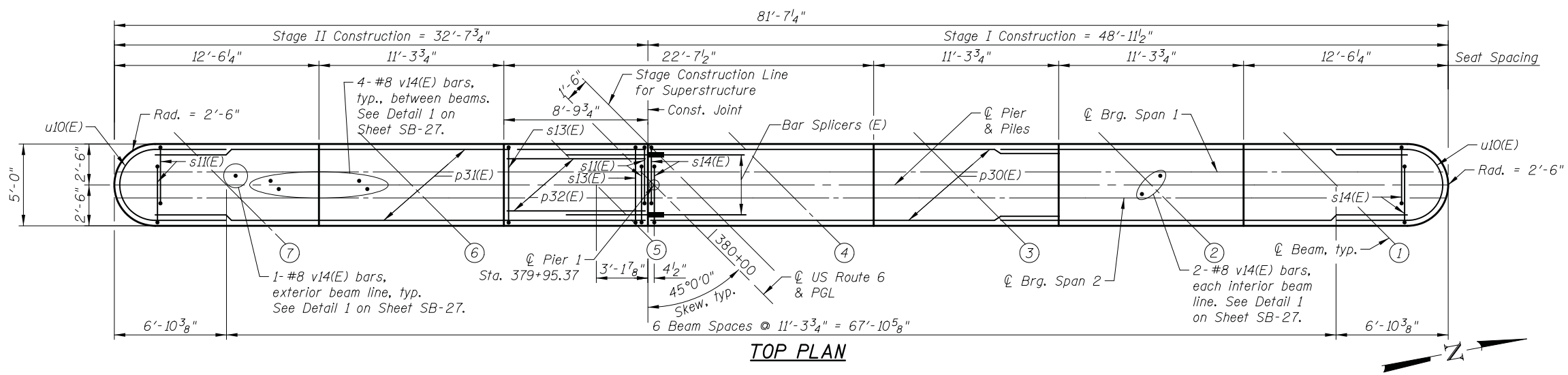
BAR v2(E)
(Headed)



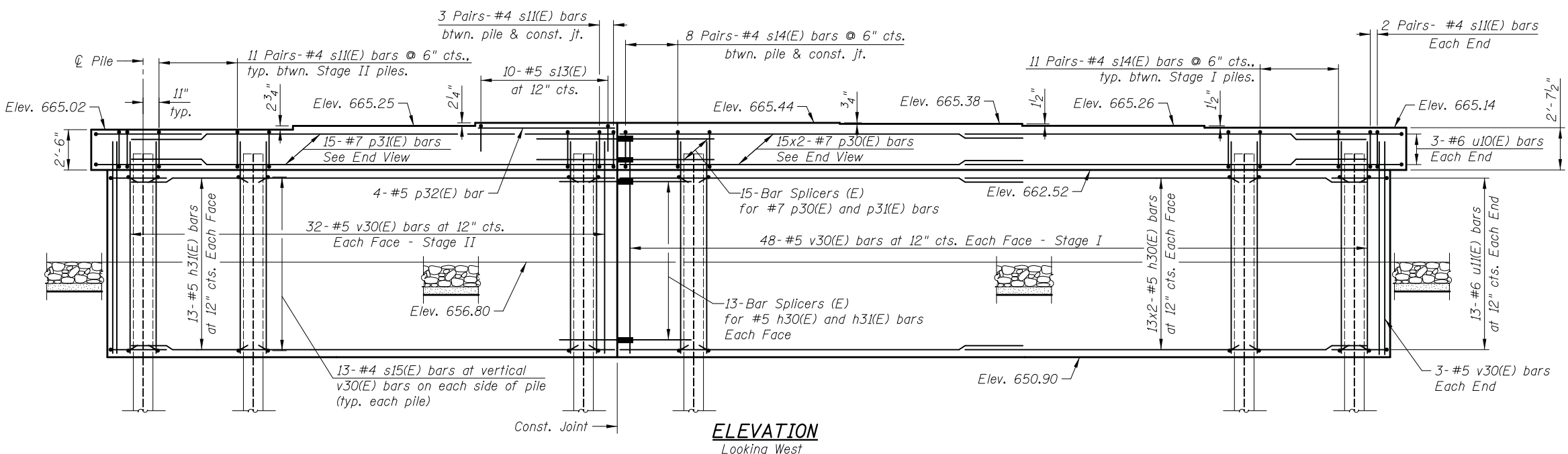
BARS s42(E), u1(E), & u21(E)

Bar	A	B
s42(E)	1'-8"	3'-7"
u1(E)	2'-0"	3'-2"
u21(E)	2'-0"	3'-7"

PILE DATA
 Type: HP14x73 with pile shoes
 Nominal Required Bearing: 578 kips
 Factored Resistance Available: 318 kips
 Est. Length: 47 ft.
 No. Production Piles: 11
 No. Test Piles: 1

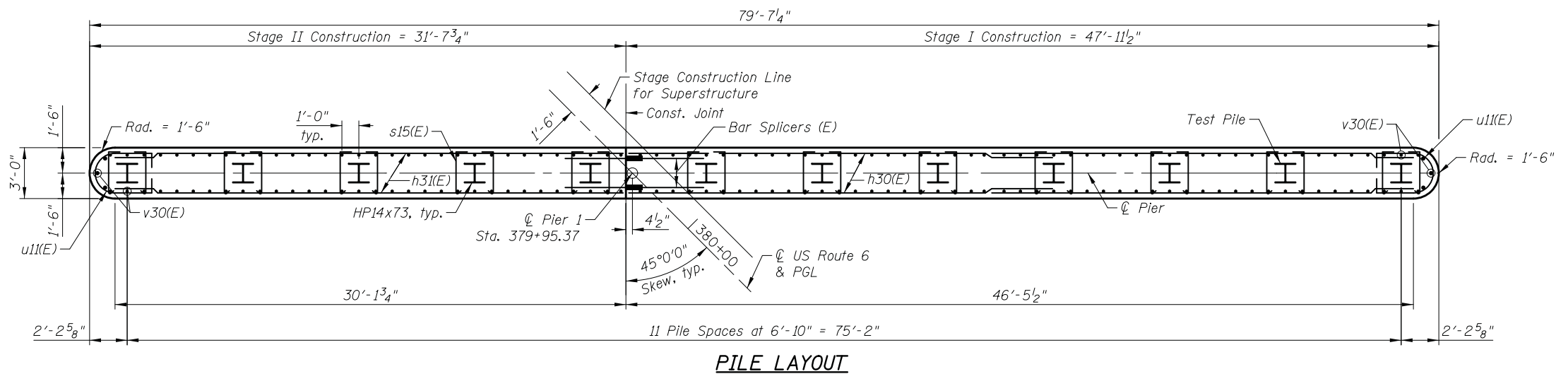


TOP PLAN



ELEVATION
Looking West

MINIMUM LAP
 #5 bar = 3'-7"
 #6 bar = 4'-4"
 #7 bar = 5'-0"



PILE LAYOUT

- Notes:
1. For End View, Bill of Material, minimum bar laps and Bar Bending Diagrams, see Sheet SB-27.
 2. Pour steps monolithically with cap.
 3. Space reinforcement in cap to miss anchor bolts.
 4. For details of piles, see Sheet SB-29.
 5. For diaphragms details, see Sheet SB-15.
 6. For bar splicers, see Sheet SB-30.
 7. Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths.

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DESIGNED	- E. VAYSMAN	REVISED	-
CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 1/30/2019	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	209
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

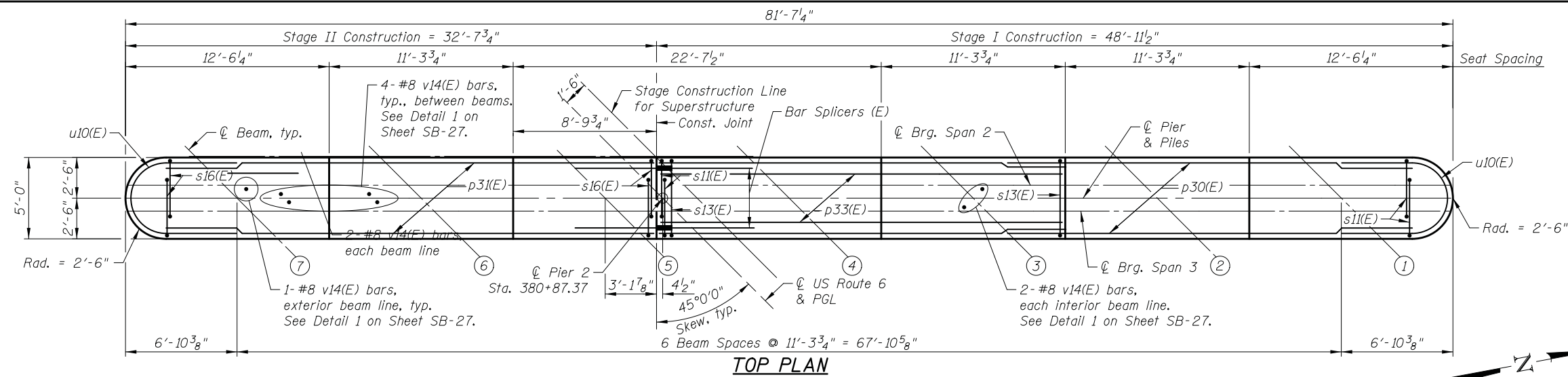
SHEET NO. SB-25 OF SB-35 SHEETS

PILE DATA

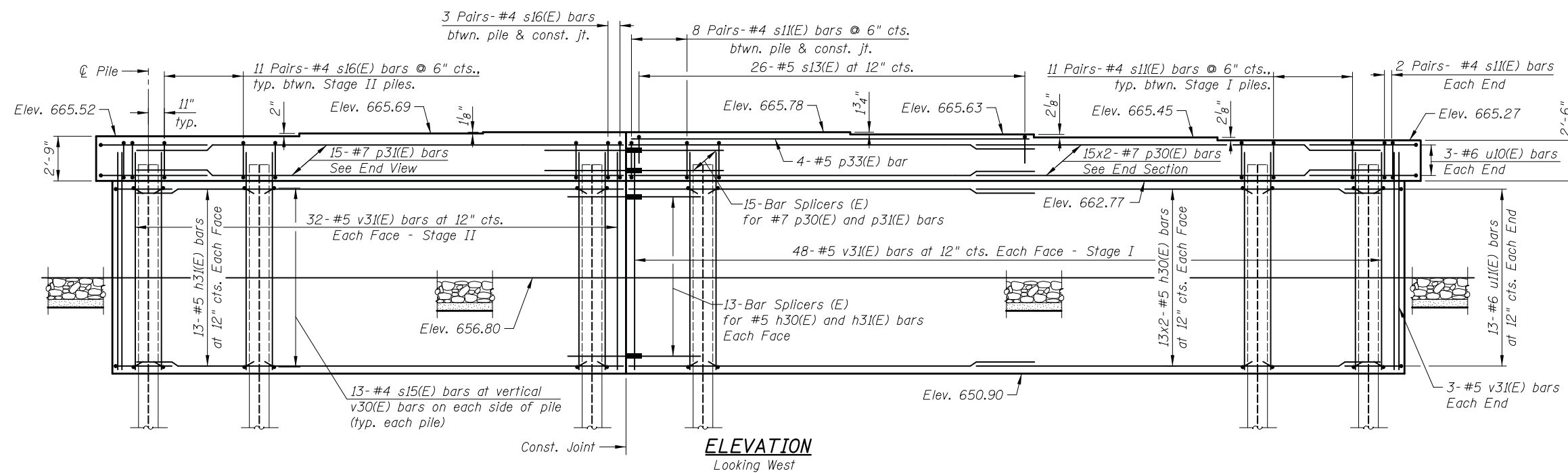
Type: HP14x73 with pile shoes
 Nominal Required Bearing: 578 kips
 Factored Resistance Available: 318 kips
 Est. Length: 44 ft.
 No. Production Piles: 11
 No. Test Piles: 1

MINIMUM LAP

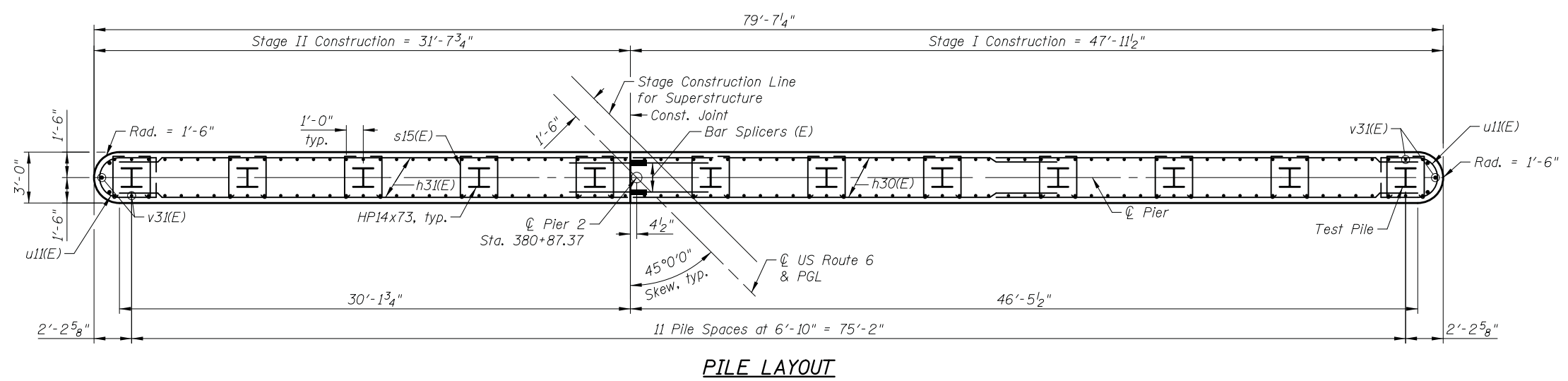
#5 bar = 3'-7"
 #6 bar = 4'-4"
 #7 bar = 5'-0"



TOP PLAN



ELEVATION
Looking West



PILE LAYOUT

- Notes:
1. For End View, Bill of Material, minimum bar laps and Bar Bending Diagrams, see Sheet SB-27.
 2. Pour steps monolithically with cap.
 3. Space reinforcement in cap to miss anchor bolts.
 4. For details of piles, see Sheet SB-29.
 5. For diaphragms details, see Sheet SB-15.
 6. For bar splicers, see Sheet SB-30.
 7. Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths.

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DESIGNED	- E. VAYSMAN	REVISED	-
CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 1/30/2019	REVISED	-

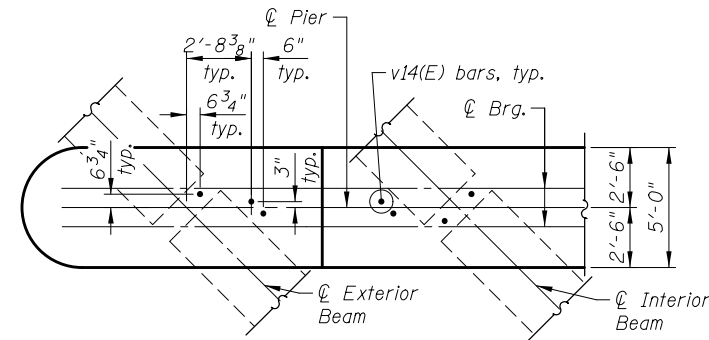
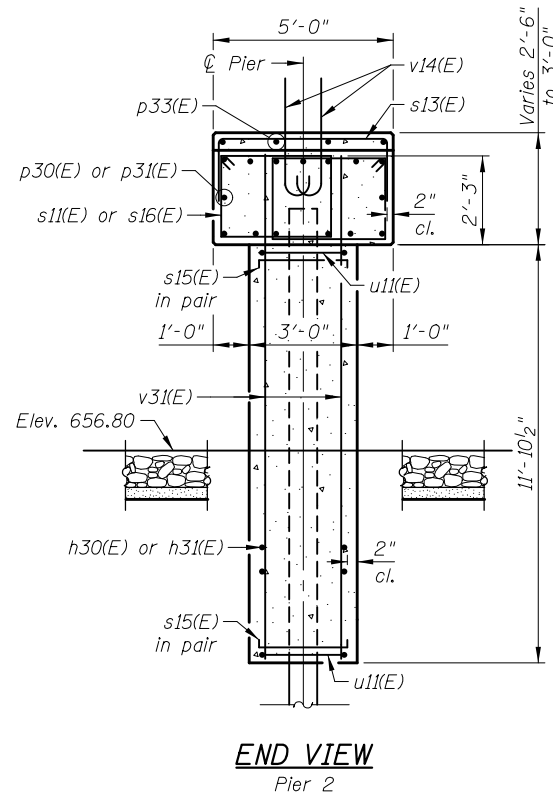
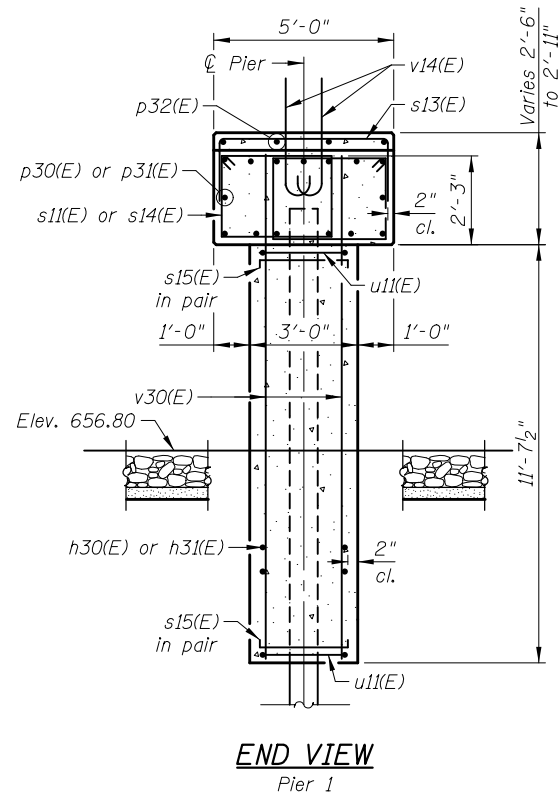
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543

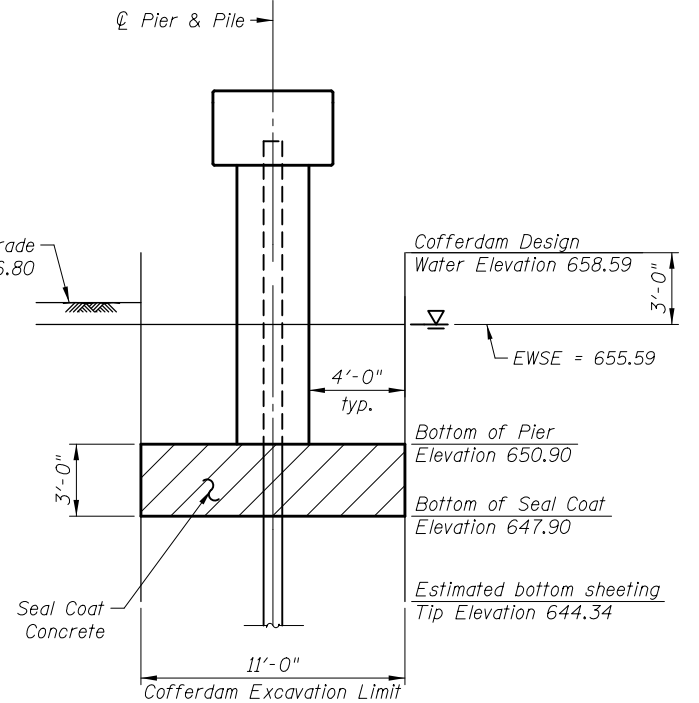
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	210
CONTRACT NO. 60R52				

SHEET NO. SB-26 OF SB-35 SHEETS

ILLINOIS FED. AID PROJECT



DETAIL 1
For location of Detail 1 see Sheets SB-25 and SB-26



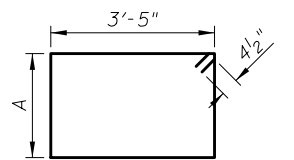
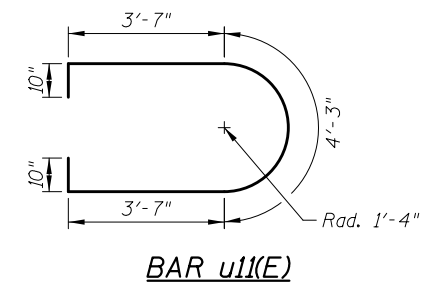
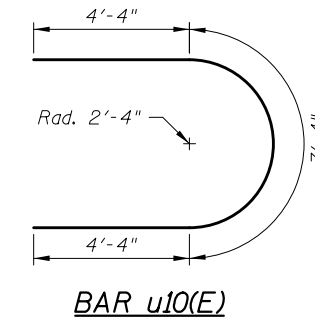
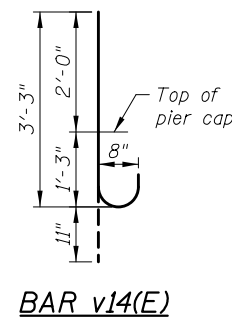
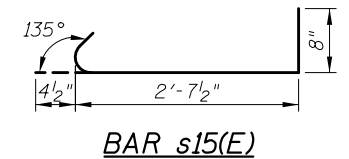
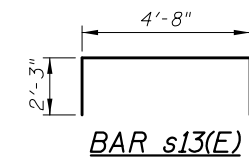
Note: (at Piers 1 & 2)
It is the Contractor's responsibility to provide a design for the cofferdam and the required appurtenances, subject to approval of the Engineer. Plan dimensions of the cofferdam are 11'-0" x 87'-6" min.

BILL OF MATERIAL
(Pier 1)

Bar	No.	Size	Length	Shape
h30(E)	52	#5	25'-0"	—
h31(E)	26	#5	30'-0"	—
p30(E)	30	#7	25'-8"	—
p31(E)	15	#7	30'-0"	—
p32(E)	4	#5	8'-6"	—
s11(E)	98	#4	11'-11"	□
s13(E)	10	#5	9'-2"	□
s14(E)	152	#4	12'-1"	□
s15(E)	312	#4	3'-8"	□
u10(E)	6	#6	15'-0"	U
u11(E)	26	#6	13'-1"	U
v14(E)	36	#8	4'-2"	C
v30(E)	166	#5	13'-9"	—
Cofferdam Excavation	Cu. Yd.		521	
Cofferdam (Type 2) (Location-3)	Each		1	
Concrete Structures	Cu. Yd.		143.1	
Seal Coat Concrete	Cu. Yd.		107.1	
Reinforcement Bars, Epoxy Coated	Pound		8,620	
Furnishing Steel Piles HP14x73	Foot		517	
Driving Piles	Foot		517	
Test Pile Steel HP14x73	Each		1	
Pile Shoes	Each		12	

BILL OF MATERIAL
(Pier 2)

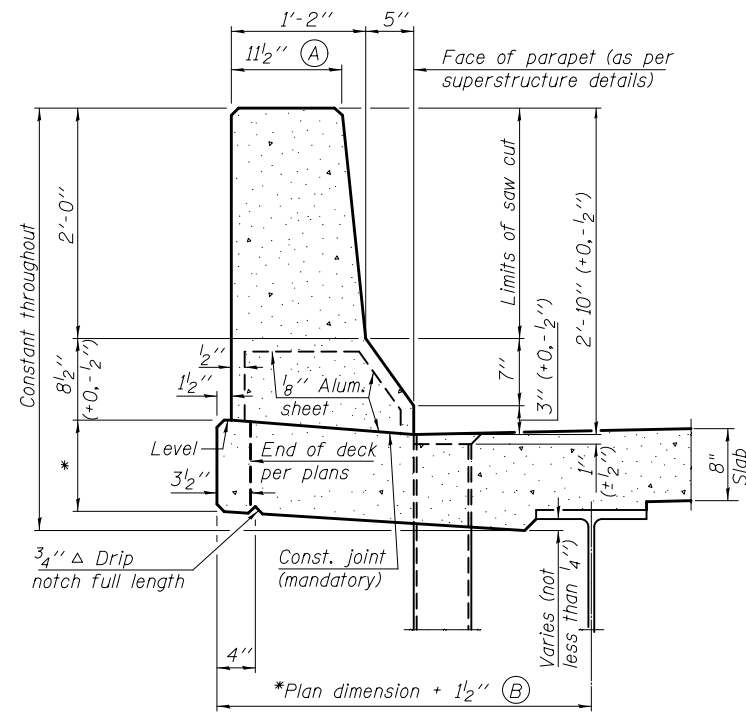
Bar	No.	Size	Length	Shape
h30(E)	52	#5	25'-0"	—
h31(E)	26	#5	30'-0"	—
p30(E)	30	#7	25'-8"	—
p31(E)	15	#7	30'-0"	—
p33(E)	4	#5	24'-10"	—
s11(E)	152	#4	11'-11"	□
s13(E)	26	#5	9'-2"	□
s15(E)	312	#4	3'-8"	□
s16(E)	98	#4	12'-5"	□
u10(E)	6	#6	15'-0"	U
u11(E)	26	#6	13'-1"	U
v14(E)	36	#8	4'-2"	C
v31(E)	166	#5	14'-0"	—
Cofferdam Excavation	Cu. Yd.		541	
Cofferdam (Type 2) (Location-4)	Each		1	
Concrete Structures	Cu. Yd.		146.2	
Seal Coat Concrete	Cu. Yd.		107.1	
Reinforcement Bars, Epoxy Coated	Pound		8,850	
Furnishing Steel Piles HP14x73	Foot		484	
Driving Piles	Foot		484	
Test Pile Steel HP14x73	Each		1	
Pile Shoes	Each		12	



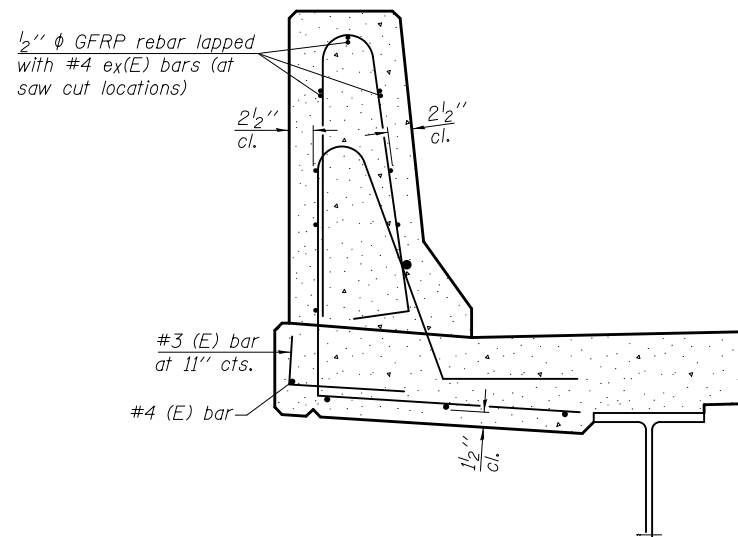
BARS s11(E), s14(E), & s16(E)

Bar	A
s11(E)	2'-2"
s14(E)	2'-3"
s16(E)	2'-5"

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34" F SHAPE PARAPET SECTION
(Showing dimensions)

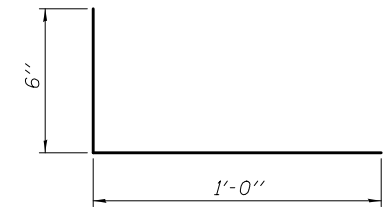


SECTION

(34" parapet shown - 42" parapet similar)
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

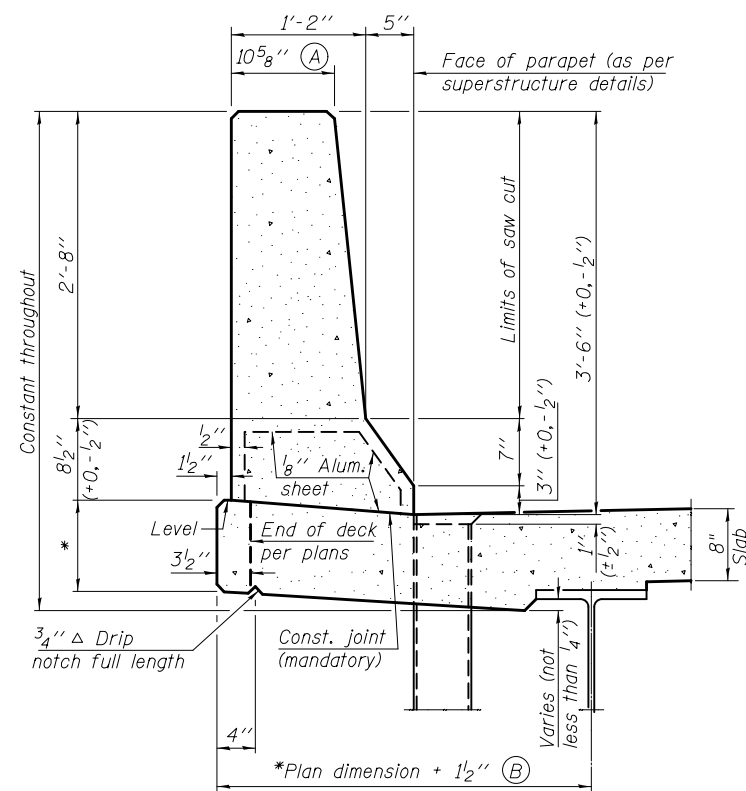
Notes:

1. All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet.
2. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.
3. Steel superstructure shown. Other superstructure types similar.

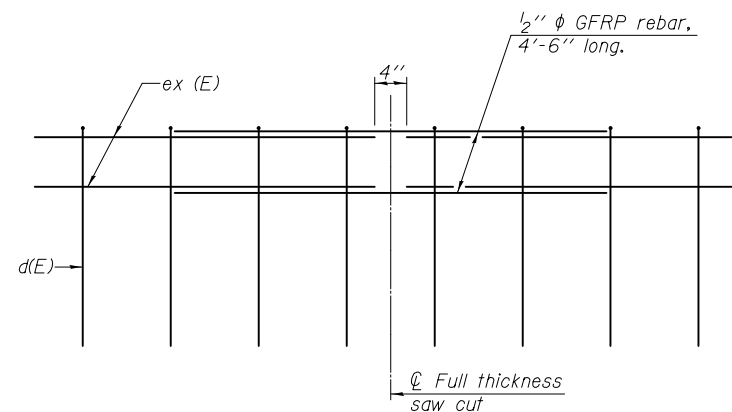


#3 (E) BAR

* See Superstructure Details

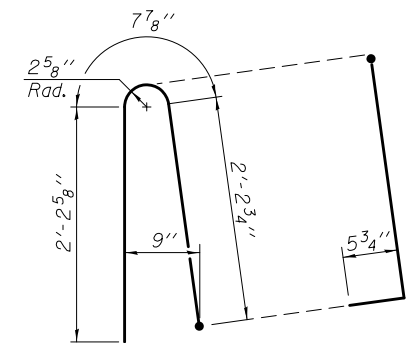


42" F SHAPE PARAPET SECTION
(Showing dimensions)

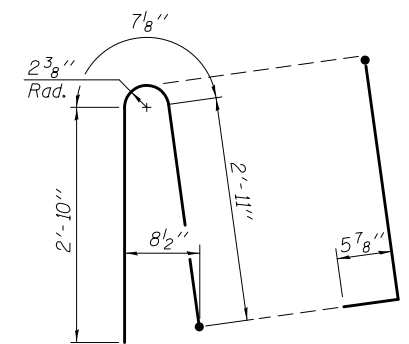


GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)



ALTERNATE BAR d(E)
(For 34" parapet when conduit is present)



ALTERNATE BAR d(E)
(For 42" parapet when conduit is present)

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Two Pierce Place, Suite 1400
Itasca, Illinois 60143
Tel: 630.773.3900 Fax: 630.773.3975
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DRAWN	- E. VAYSMAN	REVISED	-
DESIGNED	- E. VAYSMAN	REVISED	-
CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 1/30/2019	REVISED	-

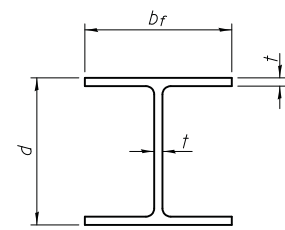
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MODIFIED CONCRETE PARAPET SLIPFORMING OPTION
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543**

SHEET NO. SB-28 OF SB-35 SHEETS

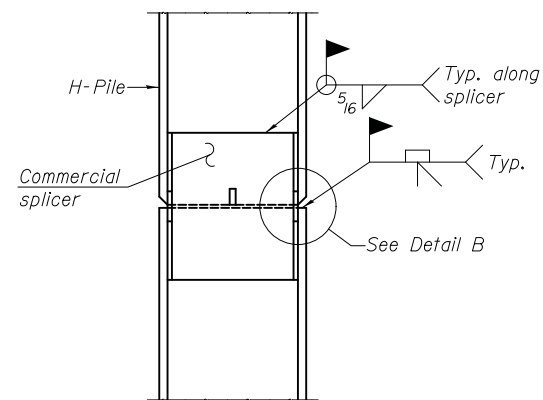
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	212
CONTRACT NO. 60R52				

ILLINOIS FED. AID PROJECT

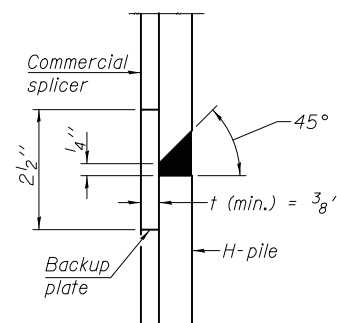


STEEL PILE TABLE

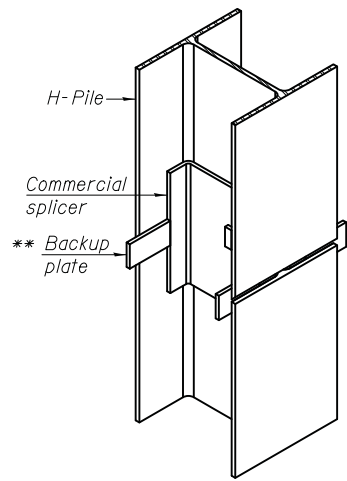
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION

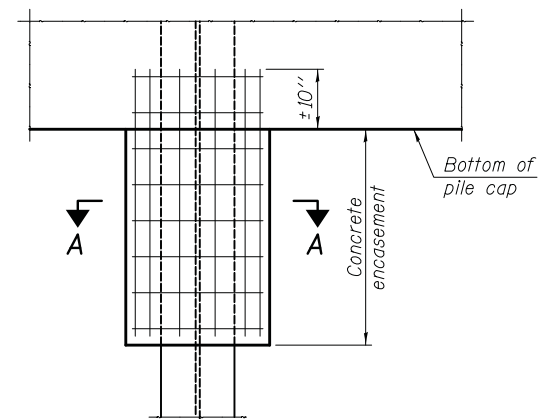


DETAIL "B"



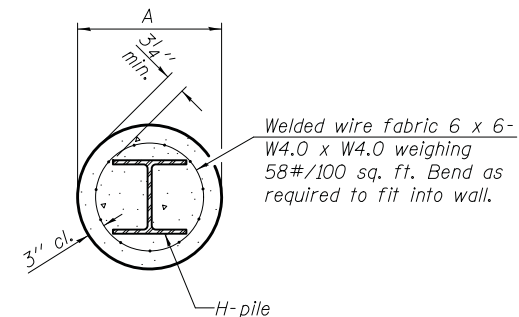
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



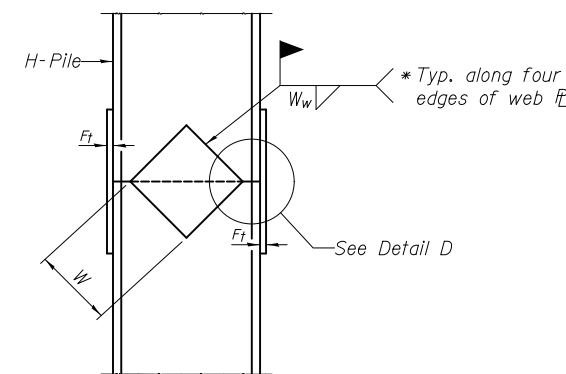
ELEVATION

PILE ENCASEMENT

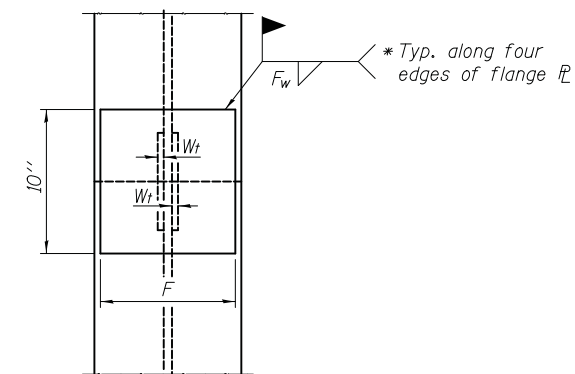


SECTION A-A

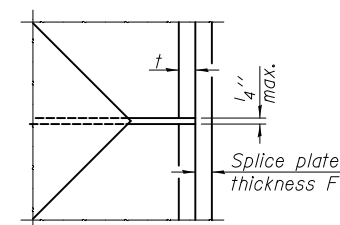
Note:
Forms for encasement may be omitted when soil conditions permit.



ELEVATION



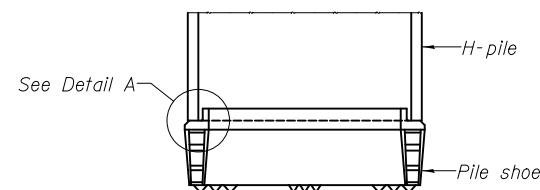
END VIEW



DETAIL D

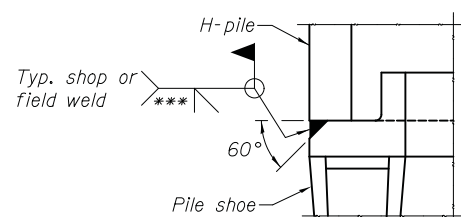
WELDED PLATE FIELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

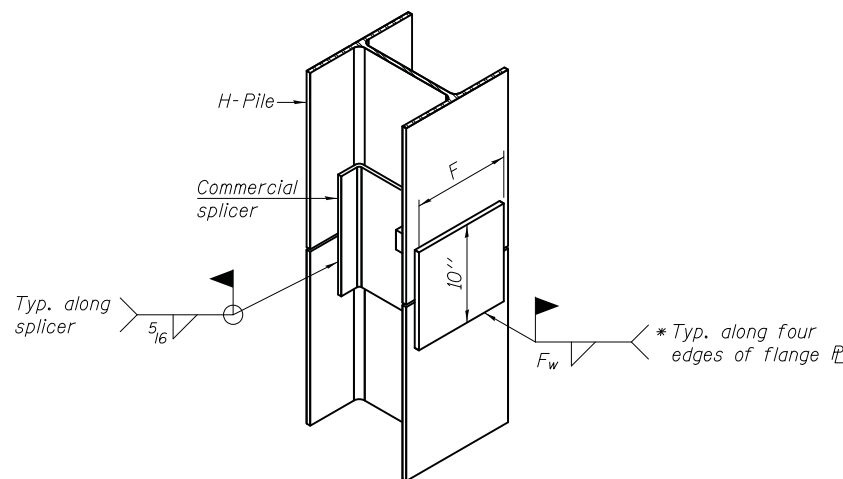


ELEVATION

H-PILE SHOE ATTACHMENT



DETAIL A



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

Note:

1. The steel H-piles shall be according to AASHTO M270 Grade 50.

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F-HP 1-27-12

CIVILTECH
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DRAWN - E. VAYSMAN
DESIGNED - E. VAYSMAN
CHECKED - G. HATLESTAD
DATE - 1/30/2019

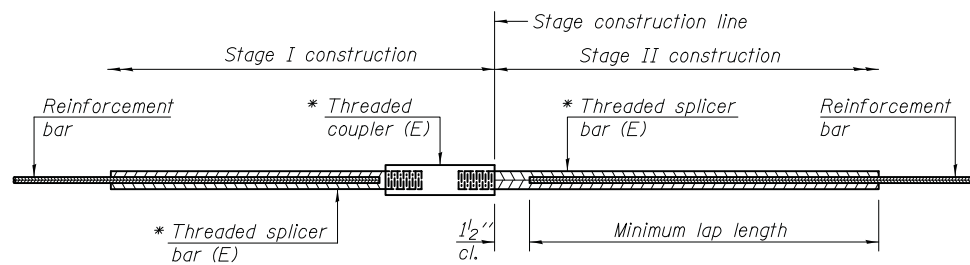
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HP PILE DETAILS
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543**

SHEET NO. SB-29 OF SB-35 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	213
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				



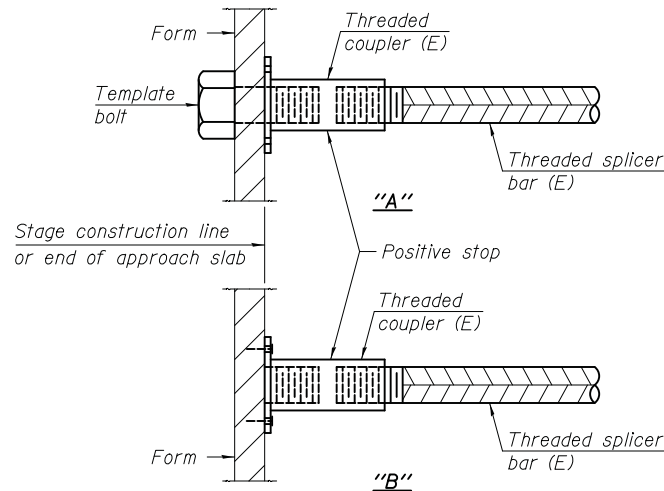
STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck, Top	#5	439	3'-6"
Deck, Bottom	#5	269	3'-6"
Abutment Diaphragms** (between beam webs)	#6	4	4'-9"
Abutment Diaphragms** (between beam flanges)	#6	2	3'-2"
Abutment Diaphragms	#6	8	4'-0"
Pier Diaphragms** (between beam webs)	#6	8	4'-9"
Pier Diaphragms** (between beam flanges)	#6	4	3'-2"
Approach Slabs, Top	#5	64	3'-2"
Approach Slabs, Bottom	#8	86	4'-9"
Approach Footings, Top & Bottom	#5	80	3'-2"
West Abutment	#7	10	5'-0"
East Abutment	#7	10	5'-0"
Pier 1	#5	26	3'-7"
Pier 1	#7	15	5'-0"
Pier 2	#5	26	3'-7"
Pier 2	#7	15	5'-0"

** See Bar Splicer Assembly for Abutment & Pier Diaphragms at Stage Construction Line Detail below.

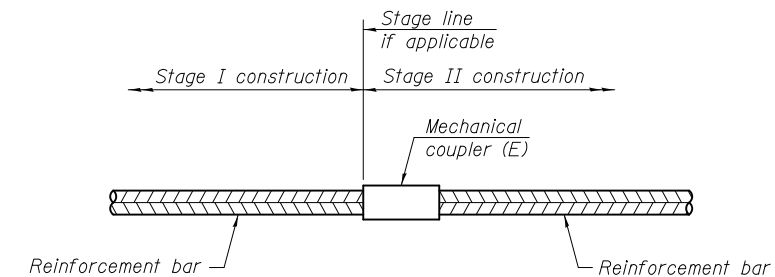


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

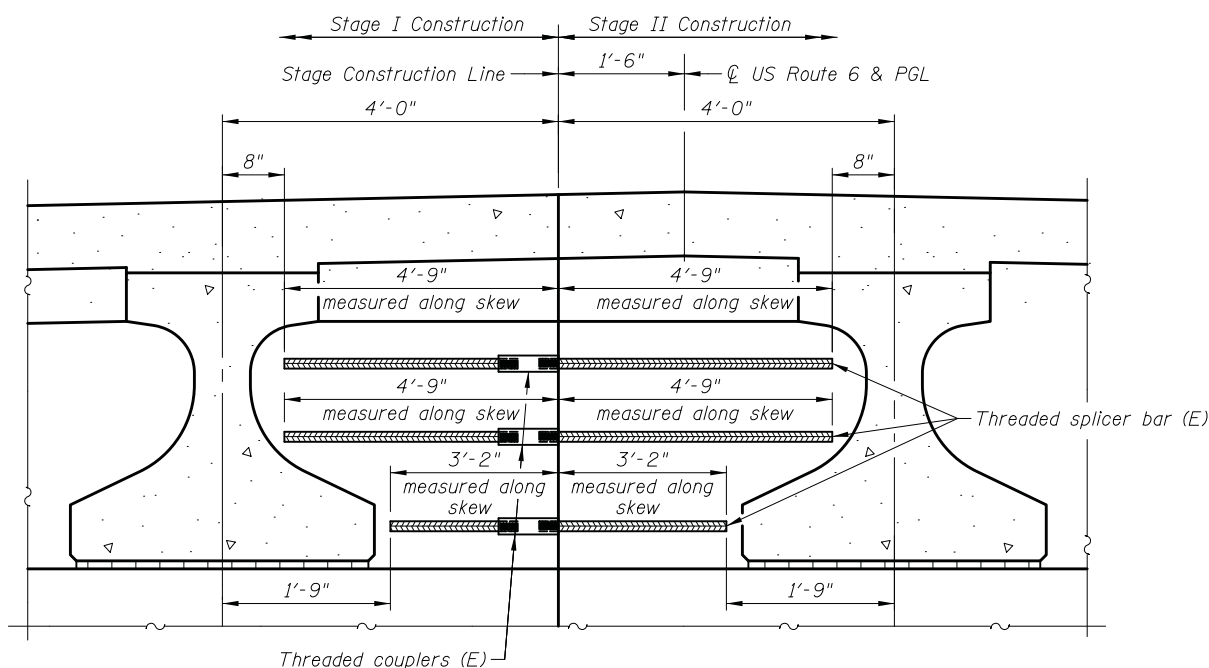
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



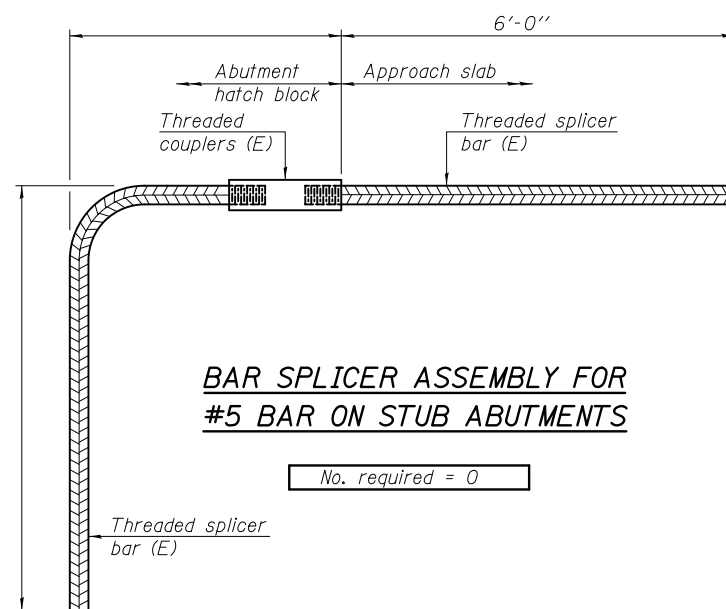
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR ABUTMENT & PIER DIAPHRAGMS AT STAGE CONSTRUCTION LINE

Dimensions are at right angles to ϕ US Route 6 unless otherwise noted.



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 0

Notes:

1. Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
2. All reinforcement shall be lapped and tied to the splicer bars.
3. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
4. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
662.1	18-inch thick ASPHALT --PAVEMENT--												
	Very soft to medium stiff, brown SILTY CLAY to SILTY CLAY LOAM, trace gravel --FILL--	1	1	2	0.50	20		--wet--	9	4	5	4	NP 22
		2	2	2									
		3	3	5									
		5	2	1	0.50	26		--wet--	10	6	14	20	NP 18
		10	3	2									
		15	3	3									
655.6	Soft to medium stiff, black LOAM, trace organic matter	10	4	1	0.25	23			11	10	6	8	NR
		20	3	2									
		25	3	3									
651.6	--L _c (%) = 34, P _c (%) = 18-- --%Gravel = 6.8%-- --%Sand = 37.8%-- --%Silt = 41.9%-- --%Clay = 13.5%-- Very loose to dense, brown, fine to coarse SAND, trace to little gravel	10	4	1	0.90	39		--dry--	12	7	15	11	NP 12
		15	5	1	0.41	45							
		20	2	1									
		25	4	7									
		30	4	4									
		35	5	4									
		40	6	7									
		45	4	4									
		50	4	4									
		55	8	4									
		60	4	4									

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	05-23-2014	Complete Drilling	05-26-2014	While Drilling	▽	12.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	D50 TMR	At Completion of Drilling	▽	NA	
Driller	R&J	Logger	S. Woods	Time After Drilling	NA		
Checked by	M. Snider			Depth to Water	▽	NA	
Drilling Method	2.25 SSA to 10 feet, mud rotary below 10 feet; 140 lb auto hammer; boring backfilled upon completion			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
620.6	Very dense weathered DOLOSTONE						600.6	Boring terminated at 63.00 ft					
		45	15	10	3				65				
		50	16						70				
615.6	Strong, greenish and gray, very poor to fair quality DOLOSTONE, 2 inch horizontal joint spacing with slicken joint wall surface, slightly weathered joints, soft and greenish infill with thickness < 0.2 in, dry	50	16						75				
	--Run #1: 48 to 53 feet-- --Recovery = 53%-- --RQD = 28%--								80				
	--Run #2: 53 to 63 feet-- --Recovery = 85%-- --RQD = 61%--												
		55	17										
		60											

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	05-23-2014	Complete Drilling	05-26-2014	While Drilling	▽	12.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	D50 TMR	At Completion of Drilling	▽	NA	
Driller	R&J	Logger	S. Woods	Time After Drilling	NA		
Checked by	M. Snider			Depth to Water	▽	NA	
Drilling Method	2.25 SSA to 10 feet, mud rotary below 10 feet; 140 lb auto hammer; boring backfilled upon completion			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

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 1/31/2018

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
662.7	15-inch thick ASPHALT --PAVEMENT--														
	Medium stiff to very stiff, brown SILTY CLAY LOAM to SILTY CLAY, trace gravel --FILL--	1	X	1	3 4 6	2.50 P	18		--moist--	9	X	9	5 5 7	NP	16
		2	X	2	2 2 5	0.75 P	23		--moist--	25	X	10	8 8 7	NP	16
658.4	Very soft to medium stiff, black SILTY LOAM, trace gravel and organic matter	3	X	3	1 2 3	<0.25 P	38		--moist--		X	11	20 15 18	NP	8
		4	X	4	1 3 4	0.74 B	40		--dry--	30	X	12	12 7 8	NP	11
653.4	Stiff, black CLAY LOAM, some gravel and trace organic matter	5	X	5	1 4 8	1.07 B	31								
649.4	Medium dense, brown, fine to medium SAND, trace gravel	6	O	6	10 10 8	NR				35	O	13	4 7 7	NR	
	--moist--	7	X	7	9 6 4	NP	11								
	--moist--	8	X	8	7 6 5	NP	13			40	O	14	6 4 3	NR	

GENERAL NOTES

Begin Drilling **05-15-2014** Complete Drilling **05-15-2014**

Drilling Contractor **Wang Testing Service** Drill Rig **D50 TMR**

Driller **R&J** Logger **S. Woods** Checked by **M. Snider**

Drilling Method **2.25 SSA to 10 feet, mud rotary below 10 feet; 140 lb auto hammer; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **14.00 ft**

At Completion of Drilling **NA**

Time After Drilling **NA**

Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
620.9	Weathered DOLOSTONE														
618.4	Strong, grayish, poor quality DOLOSTONE, <0.05 inch horizontal joint spacing, slightly rough joint wall surface														
	--Run #1: 45.5 to 55.5 feet-- --Recovery = 70%-- --RQD = 40%-- --Q _u = 12,070 psi-- --6-inch thick shale--														
608.4	Boring terminated at 55.50 ft														

GENERAL NOTES

Begin Drilling **05-15-2014** Complete Drilling **05-15-2014**

Drilling Contractor **Wang Testing Service** Drill Rig **D50 TMR**

Driller **R&J** Logger **S. Woods** Checked by **M. Snider**

Drilling Method **2.25 SSA to 10 feet, mud rotary below 10 feet; 140 lb auto hammer; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling **14.00 ft**

At Completion of Drilling **NA**

Time After Drilling **NA**

Depth to Water **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BSB-03

WEI Job No.: 401-05-01

Client: **Civiltech Engineering, Inc.**
Project: **US Route 6 over Marley Creek**
Location: **New Lenox, Will County, IL**

Datum: NAVD88
Elevation: 664.09 ft
North: 1779306.75 ft
East: 1095436.20 ft
Station: 380+92.94
Offset: 17.52 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
662.6	18-inch thick ASPHALT --PAVEMENT--								--saturated--						
	Very soft to medium stiff, brown and black SILTY CLAY to SILTY CLAY LOAM --FILL--	1	X	10	4	0.25	12		--saturated--	9	X	2	NP	15	
659.6	Soft, black SILTY LOAM, trace organic matter	5	X	1	1	0.41	28		--saturated--	10	X	4	NP	15	
656.1	Loose, brown, fine SAND	10	X	2	8	0.50	45		--dry--	11	X	8	NP	10	
655.3	Medium stiff, black SILTY CLAY, trace gravel	15	X	1	2	0.82	42		--dry--	12	X	9	NP	15	
651.1	Medium dense to dense, brown, medium to coarse SAND, trace gravel	20	X	1	2	0.57	33		--dry--	13	X	27	NP	10	
646.1	Loose to dense, gray SILT, trace gravel	25	X	21	25	NP	12		--dry--	14	X	18	NP	12	
	Dense, brown, fine to medium SAND, trace gravel	30	X	11	8	NP	16			15	X	22	NP	10	
		35	X	6	6	NP	11			16	X	21	NP	12	
		40	X	7	7	NP	11			17	X	15	NP	12	

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	05-20-2014	Complete Drilling	05-20-2014	While Drilling	▽	8.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	D50 TMR	At Completion of Drilling	▽	7.00 ft	
Driller	R&J	Logger	S. Woods	Time After Drilling	NA		
Drilling Method	2.25 SSA to 10 feet, mud rotary below 10 feet; 140 lb auto hammer; boring backfilled upon completion			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							



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BORING LOG BSB-03

WEI Job No.: 401-05-01

Client: **Civiltech Engineering, Inc.**
Project: **US Route 6 over Marley Creek**
Location: **New Lenox, Will County, IL**

Datum: NAVD88
Elevation: 664.09 ft
North: 1779306.75 ft
East: 1095436.20 ft
Station: 380+92.94
Offset: 17.52 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
623.1	Strong, gray, very poor quality DOLOSTONE, 2 inch horizontal joint spacing, infill thickness <0.2 inches, soft, green infill, hard and slightly rough joint wall surface														
	--Run #1: 41 to 51 feet-- --Recovery = 100%-- --RQD = 25%--	45	X	15											
	--Q _u = 12,470 psi--	50													
613.1	Boring terminated at 51.00 ft	55													
		60													

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	05-20-2014	Complete Drilling	05-20-2014	While Drilling	▽	8.00 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	D50 TMR	At Completion of Drilling	▽	7.00 ft	
Driller	R&J	Logger	S. Woods	Time After Drilling	NA		
Drilling Method	2.25 SSA to 10 feet, mud rotary below 10 feet; 140 lb auto hammer; boring backfilled upon completion			Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

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DRAWN	- E. VAYSMAN	REVISED	-
DESIGNED	- E. VAYSMAN	REVISED	-
CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 1/30/2019	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS III
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543
SHEET NO. SB-33 OF SB-35 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	217
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BSB-04
 WEI Job No.: 401-05-01

Datum: NAVD88
 Elevation: 663.73 ft
 North: 1779291.44 ft
 East: 1095472.44 ft
 Station: 381+13.10
 Offset: 16.72 RT

Client: **Civiltech Engineering, Inc.**
 Project: **US Route 6 over Marley Creek**
 Location: **New Lenox, Will County, IL**

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
662.2	18-inch thick ASPHALT --PAVEMENT--														
662.2	Very soft to soft, black and brown SILTY CLAY, trace gravel --FILL--	1	X	3	3	< 0.25	12			9	○	3	NR		
		3	X	3	3							4			
		4	X	1	1					10	X	3	NP		
		5	X	1	1	0.41	23		--moist--	25	X	1			
		2	X	1	1							2			
658.2	Very soft to soft, black SILTY LOAM, trace gravel and organic matter --L _t (%) = 46, P _t (%) = 28-- --%Gravel = 0.3%-- --%Sand = 16.1%-- --%Silt = 69.3%-- --%Clay = 14.3%--	3	X	0	1	0.41	36		--dry--	30	X	5	NP		
		1	X	1	1							9			
		1	X	1	1							9			
		4	X	1	1	< 0.25	50		--dry--	30	X	13	NP		
		10	X	1	1							14			
		3	X	3	3							10			
653.2	Medium dense to dense, brown GRAVEL and SANDY GRAVEL	5	X	3	5							10			
		19	X	18	29				--moist--	35	X	11	NP		
		18	X	18	29							15			
		29	X	6	7				--moist--	40	X	10	NP		
		7	X	6	7							6			
		11	X	6	6				--dry--	40	X	6	NP		
		8	X	6	6				--cobbles--	40	X	50/5"			
		20	X	3	3										

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	05-16-2014	Complete Drilling	05-19-2014	While Drilling	▽	31.25 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	D50 TMR	At Completion of Drilling	▽	6.00 ft	
Driller	R&J	Logger	S. Woods	Time After Drilling		NA	
Checked by	M. Snider	Drilling Method	2.25 SSA to 10 feet, mud rotary below 10 feet; 140 lb auto hammer; boring backfilled upon completion	Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BSB-04
 WEI Job No.: 401-05-01

Datum: NAVD88
 Elevation: 663.73 ft
 North: 1779291.44 ft
 East: 1095472.44 ft
 Station: 381+13.10
 Offset: 16.72 RT

Client: **Civiltech Engineering, Inc.**
 Project: **US Route 6 over Marley Creek**
 Location: **New Lenox, Will County, IL**

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
622.7	Strong, gray, poor to fair quality DOLOSTONE with approximately 2-inch horizontal joint spacing, <0.2 inches of soft greenish infilling, hard and slightly rough joint wall														
		15													
		45													
		50													
		55													
		60													
607.7	Boring terminated at 56.00 ft														

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	05-16-2014	Complete Drilling	05-19-2014	While Drilling	▽	31.25 ft	
Drilling Contractor	Wang Testing Service	Drill Rig	D50 TMR	At Completion of Drilling	▽	6.00 ft	
Driller	R&J	Logger	S. Woods	Time After Drilling		NA	
Checked by	M. Snider	Drilling Method	2.25 SSA to 10 feet, mud rotary below 10 feet; 140 lb auto hammer; boring backfilled upon completion	Depth to Water	▽	NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.							

12/21/2019 12:27:43 PM
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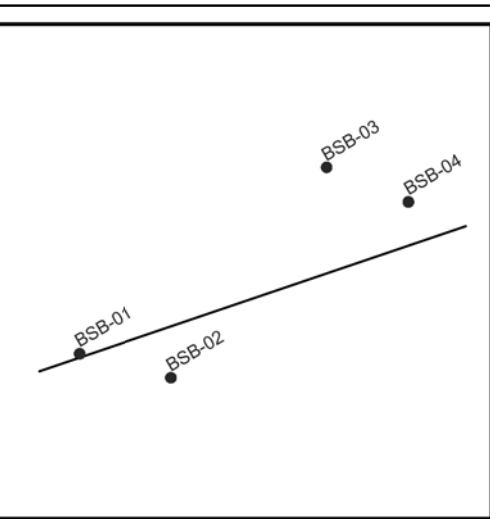
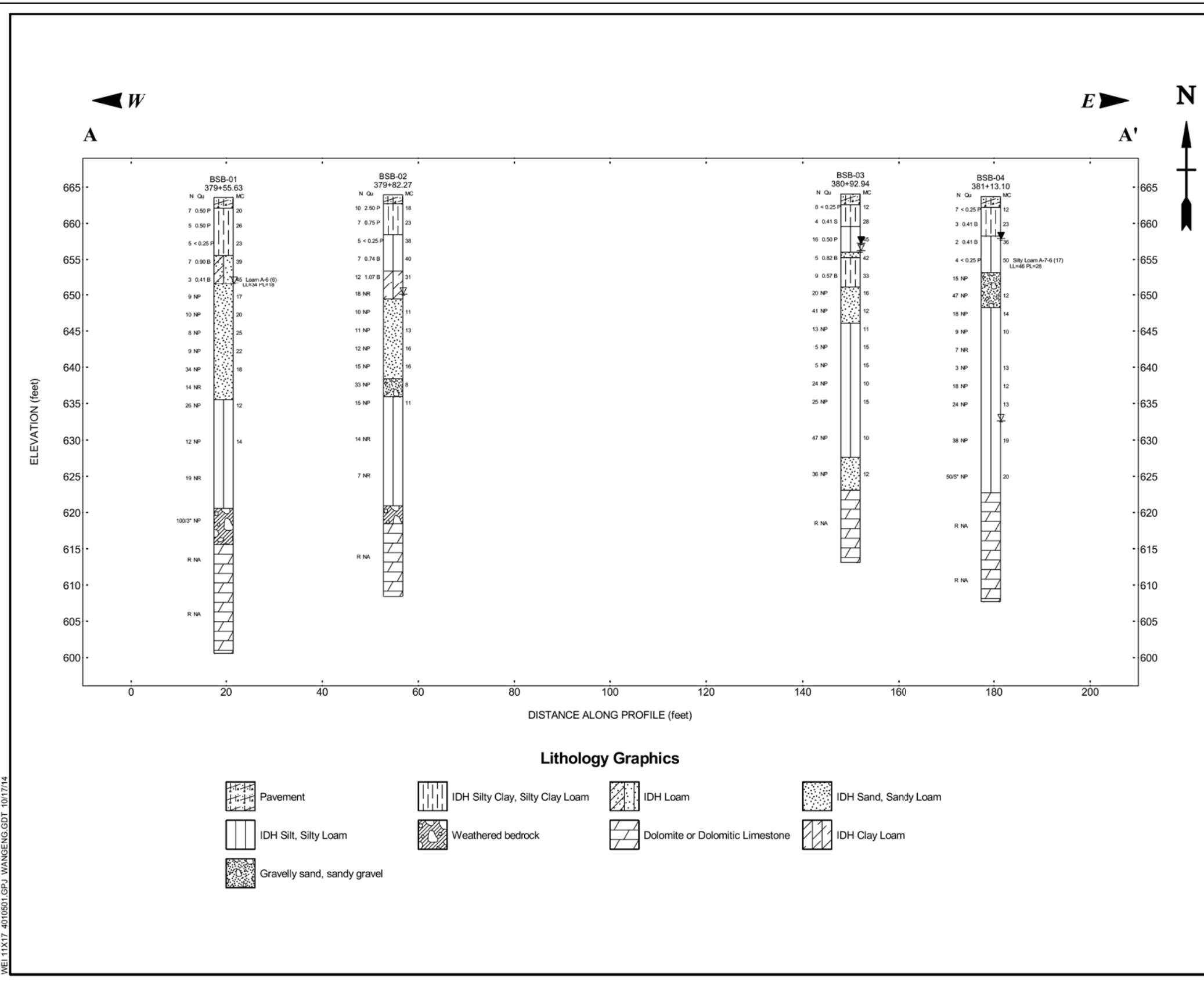


DRAWN	- E. VAYSMAN	REVISED	-
DESIGNED	- E. VAYSMAN	REVISED	-
CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 1/30/2019	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS IV
US ROUTE 6 OVER MARLEY CREEK (WEST)
STRUCTURE NO. 099-0543
 SHEET NO. SB-34 OF SB-35 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	218
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				



Site Map Scale 1 inch equals 75 feet

Explanation:

BSB-01 379+55.63 — Borehole Number Station

Borehole Lithology

N-Number (ft/12 in)
Qu-UC Strength, (ksf)
MC-Moisture Content, (%)

▽ Water Level Reading at time of drilling.
▼ Water Level Reading 24-hr after drilling or at end of drilling

Horizontal Scale (feet)

Vertical Exaggeration: 1.5x

Wang Engineering, Inc.
1145 N Main Street
Lombard, IL 60148

Soil Profile A-A'
SN 099-0543, West Bridge
over Marley Creek

US Route 6 over Marley Creek
New Lenox, Will County, IL

WEI SINCE 1982	JOB NUMBER	PLATE NUMBER
	401-05-01	EXHIBIT 4

Lithology Graphics

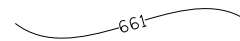
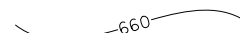

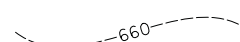
Pavement	IDH Silty Clay, Silty Clay Loam	IDH Loam	IDH Sand, Sandy Loam
IDH Silt, Silty Loam	Weathered bedrock	Dolomite or Dolomitic Limestone	IDH Clay Loam
Gravelly sand, sandy gravel			

12/21/2019 12:27:53 PM c:\p\w\work\king\civiltech\production\jot\dms20654\35_0543_SoilBorling_Profile.dgn WEI 11X17 4010501.GPJ WANGENG.GDT 10/17/14

DRAWN	- E. VAYSMAN	REVISED	-
DESIGNED	- E. VAYSMAN	REVISED	-
CHECKED	- G. HATLESTAD	REVISED	-
DATE	- 1/30/2019	REVISED	-

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R)	WILL	275	219
CONTRACT NO. 60R52				

GRADING LEGEND

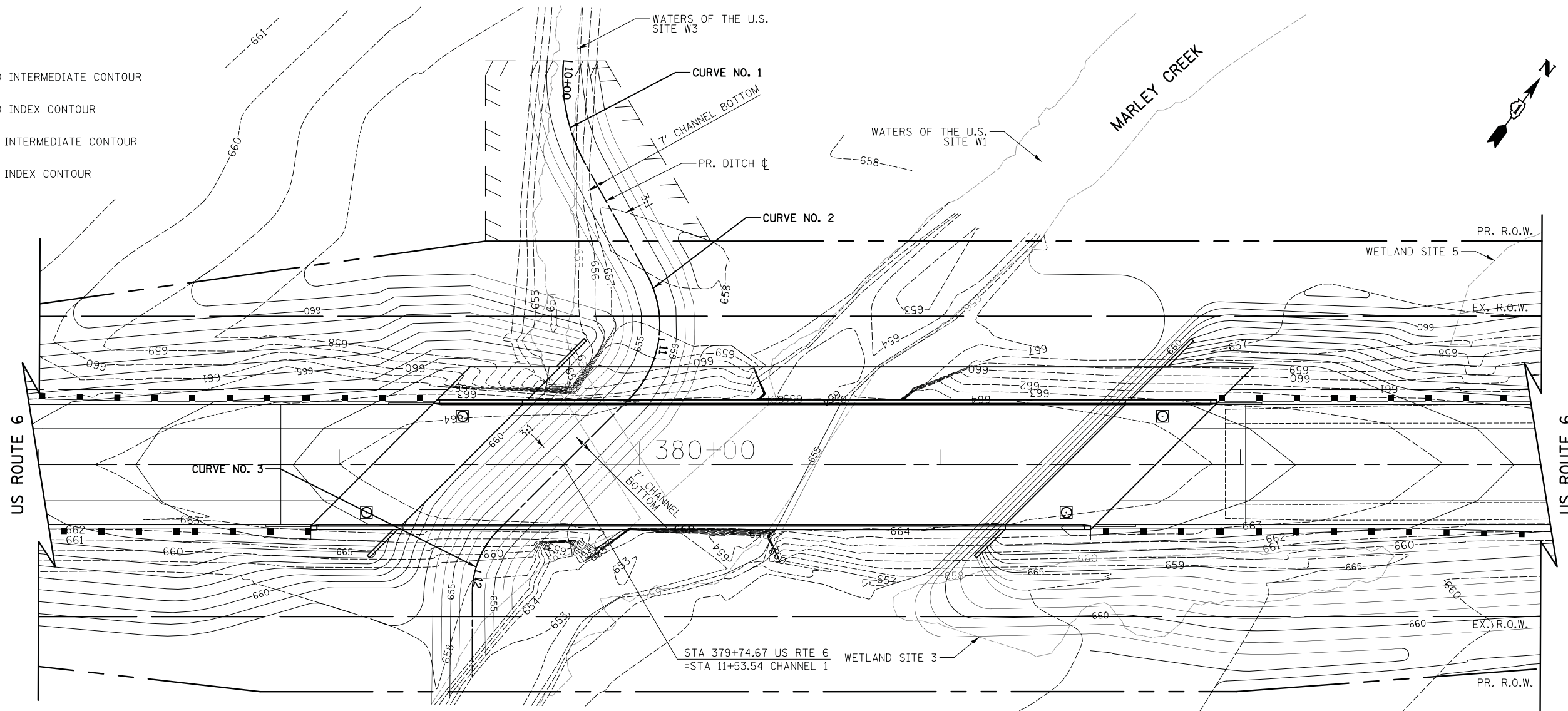
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-  PROPOSED INDEX CONTOUR
-  EXISTING INTERMEDIATE CONTOUR
-  EXISTING INDEX CONTOUR

DITCH CURVE DATA

PROP. CURVE 0149_CHANNEL-1
 PI STA. = 10+18.58
 $\Delta = 33^\circ 54' 13''$ (LT)
 D = 95° 29' 35"
 R = 60.00'
 T = 18.29'
 L = 35.50'
 E = 2.73'
 P.C. STA = 10+00.29
 P.T. STA = 10+35.79

PROP. CURVE 0149_CHANNEL-2
 PI STA. = 11+03.85
 $\Delta = 74^\circ 07' 54''$ (RT)
 D = 163° 42' 08"
 R = 35.00'
 T = 26.44'
 L = 45.28'
 E = 8.86'
 P.C. STA = 10+77.41
 P.T. STA = 11+22.70

PROP. CURVE 0149_CHANNEL-3
 PI STA. = 11+96.47
 $\Delta = 45^\circ 00' 00''$ (LT)
 D = 190° 59' 09"
 R = 30.00'
 T = 12.43'
 L = 23.56'
 E = 2.47'
 P.C. STA = 11+84.04
 P.T. STA = 12+07.60



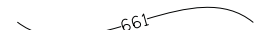
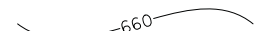
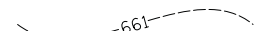
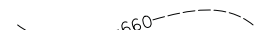
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	PLOTTED	BY
	CHECKED	
	ALIGNED	
	FILED	
	NO.	

PROFILE	SURVEYED	DATE
	GRADES	BY
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHFD	
	NO.	



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PLOT SCALE = 20.0000' / in.	CHECKED - KWH	REVISED -	SCALE: 1" = 20'			SHEET 1 OF 4 SHEETS	STA. 10+00.00 TO STA. 12+35.00	CONTRACT NO. 60R52		ILLINOIS FED. AID PROJECT
PLOT DATE = 1/31/2019	DATE - 1/30/2019	REVISED -								

GRADING LEGEND

-  PROPOSED INTERMEDIATE CONTOUR
-  PROPOSED INDEX CONTOUR
-  EXISTING INTERMEDIATE CONTOUR
-  EXISTING INDEX CONTOUR

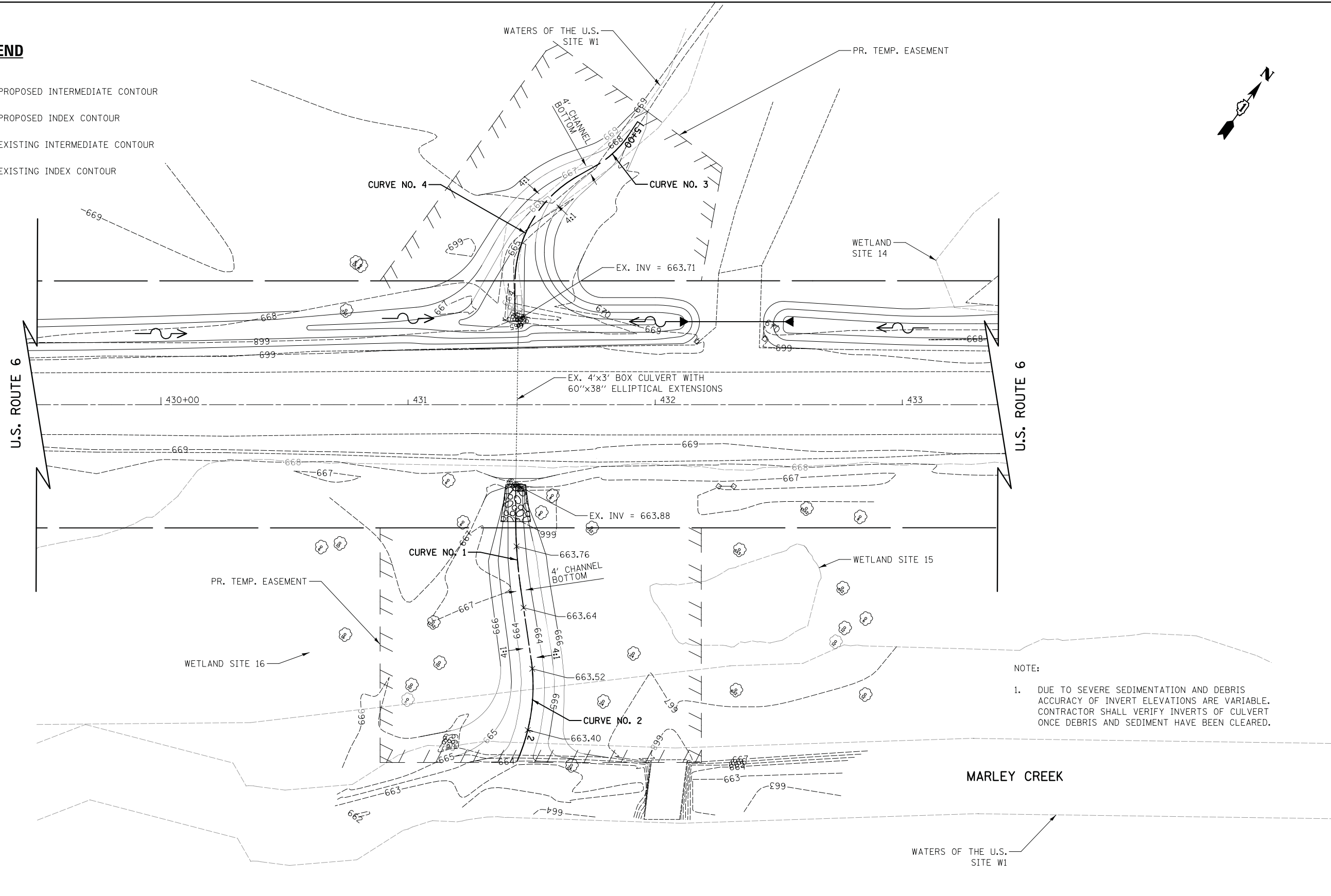
DITCH CURVE DATA

PROP. CURVE OUTLET 5-1
 PI STA. = 1+28.42
 $\Delta = 8^\circ 12' 02''$ (LT)
 $D = 28^\circ 38' 52''$
 $R = 200.00'$
 $T = 14.66'$
 $L = 29.27'$
 $E = 0.54'$
 P.C. STA = 1+13.76
 P.T. STA = 1+43.03

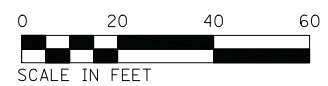
PROP. CURVE OUTLET 5-2
 PI STA. = 1+92.33
 $\Delta = 31^\circ 45' 27''$ (RT)
 $D = 76^\circ 23' 40''$
 $R = 75.00'$
 $T = 21.33'$
 $L = 41.57'$
 $E = 2.98'$
 P.C. STA = 1+70.99
 P.T. STA = 2+12.56

PROP. CURVE OUTLET 5-3
 PI STA. = 5+16.12
 $\Delta = 26^\circ 50' 17''$ (RT)
 $D = 143^\circ 14' 22''$
 $R = 40.00'$
 $T = 9.54'$
 $L = 18.74'$
 $E = 1.12'$
 P.C. STA = 5+06.57
 P.T. STA = 5+25.31

PROP. CURVE OUTLET 5-4
 PI STA. = 5+62.43
 $\Delta = 60^\circ 37' 07''$ (LT)
 $D = 114^\circ 35' 30''$
 $R = 50.00'$
 $T = 29.23'$
 $L = 52.90'$
 $E = 7.92'$
 P.C. STA = 5+33.20
 P.T. STA = 5+86.10

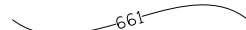
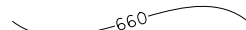
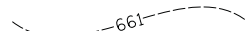
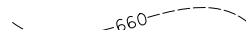


NOTE:
 1. DUE TO SEVERE SEDIMENTATION AND DEBRIS ACCURACY OF INVERT ELEVATIONS ARE VARIABLE. CONTRACTOR SHALL VERIFY INVERTS OF CULVERT ONCE DEBRIS AND SEDIMENT HAVE BEEN CLEARED.



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Default	PLOT SCALE = 20.0000' / in.	DRAWN - DTE	REVISED -			297	33B (B-R) & 33X-RS-2	WILL	275	221	
	PLOT DATE = 1/31/2019	CHECKED - KWH	REVISED -			CONTRACT NO. 60R52					
		DATE - 1/30/2019	REVISED -			ILLINOIS FED. AID PROJECT					

GRADING LEGEND

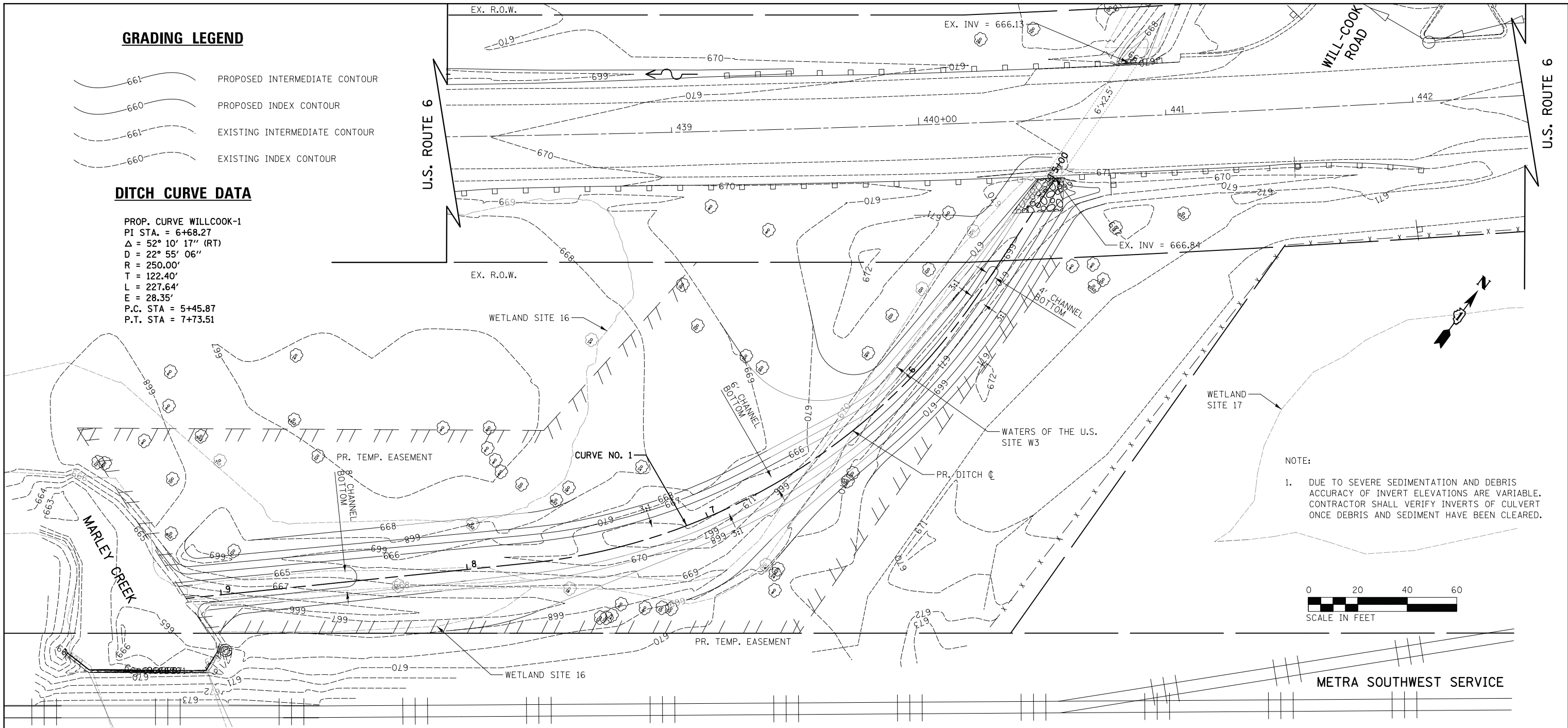
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DITCH CURVE DATA

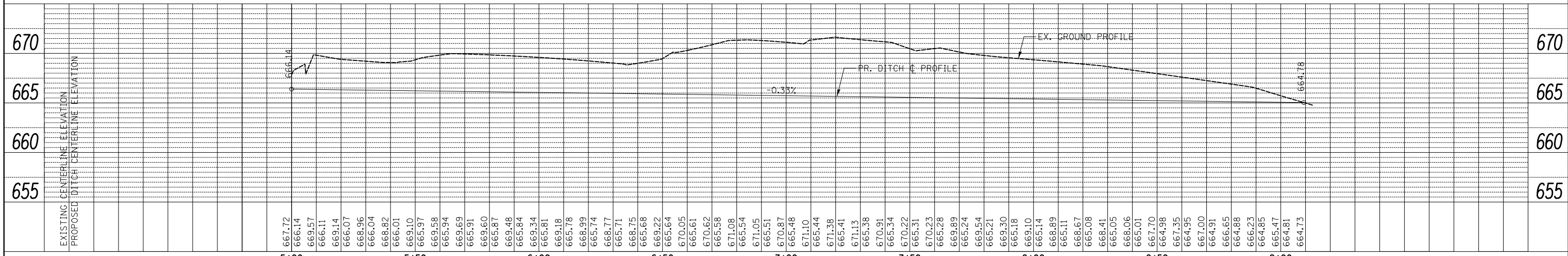
PROP. CURVE WILLCOOK-1
 PI STA. = 6+68.27
 $\Delta = 52^\circ 10' 17''$ (RT)
 $D = 22^\circ 55' 06''$
 $R = 250.00'$
 $T = 122.40'$
 $L = 227.64'$
 $E = 28.35'$
 P.C. STA = 5+45.87
 P.T. STA = 7+73.51

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	ALIGNED		
	FILED		
	CARD FILE NAME		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	GRADES		
	STRUCTURE		
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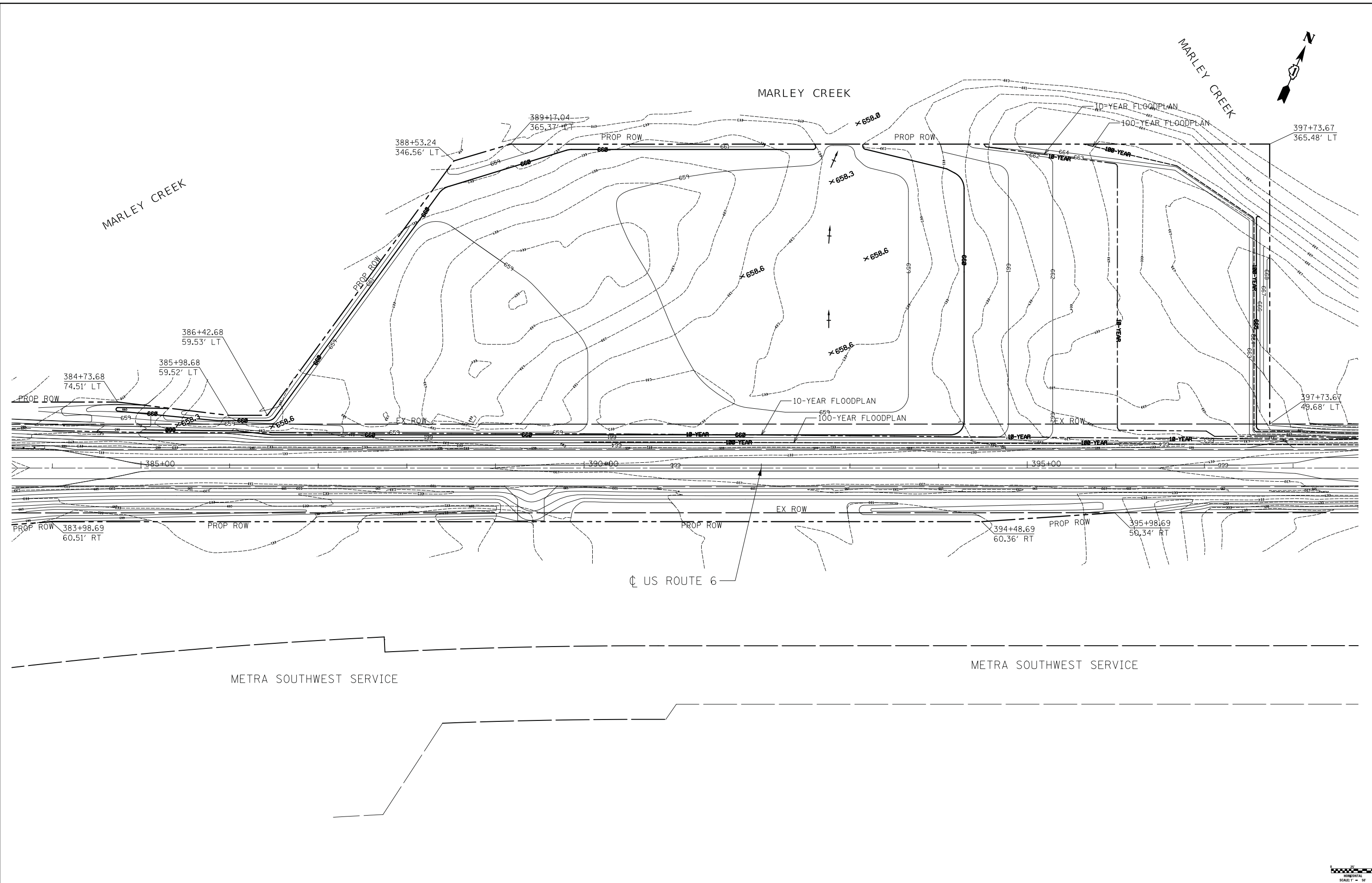


NOTE:
 1. DUE TO SEVERE SEDIMENTATION AND DEBRIS ACCURACY OF INVERT ELEVATIONS ARE VARIABLE. CONTRACTOR SHALL VERIFY INVERTS OF CULVERT ONCE DEBRIS AND SEDIMENT HAVE BEEN CLEARED.



FILE NAME =	USER NAME = jet	DESIGNED - DTE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	U.S. ROUTE 6 OVER MARLEY CREEK STA. 440+70 CULVERT GRADING PLAN	F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
...\\D160R52-sht-grad-04.dgn	PLOT SCALE = 20.0000' / in.	DRAWN - DTE	REVISED -			297	33B (B-R) & 33X-RS-2	WILL	275	222	
Default	PLOT DATE = 1/31/2019	CHECKED - KWH	REVISED -			CONTRACT NO. 60R52					
		DATE - 1/30/2019	REVISED -			ILLINOIS FED. AID PROJECT					

SCALE: 1" = 20' SHEET 4 OF 4 SHEETS STA. 5+00.00 TO STA. 9+14.22



FILE NAME = c:\pw_working\civiltech_production\jet\dms07044\DI60R52-sht-grd05.dgn
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 USER NAME = #USER#MHE#



USER NAME = jat	DESIGNED - TVN	REVISED -
DRAWN - TVN	REVISED -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

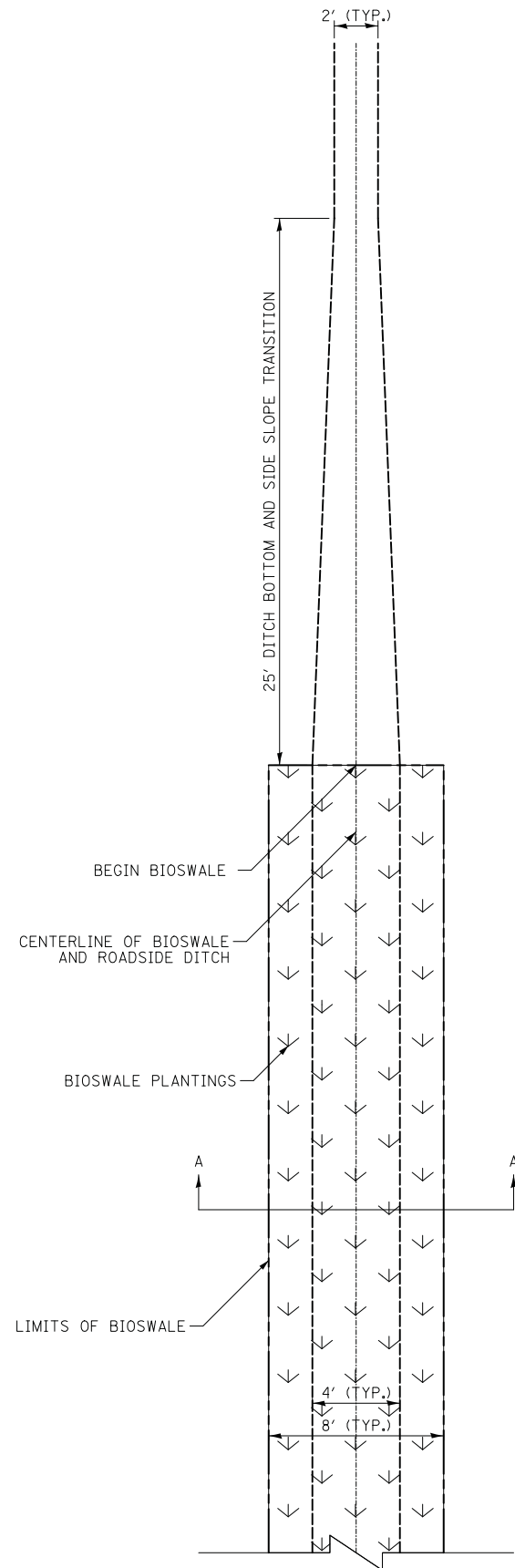
US ROUTE 6 OVER MARLEY CREEK
COMPENSATORY STORAGE AREA LAYOUT

SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

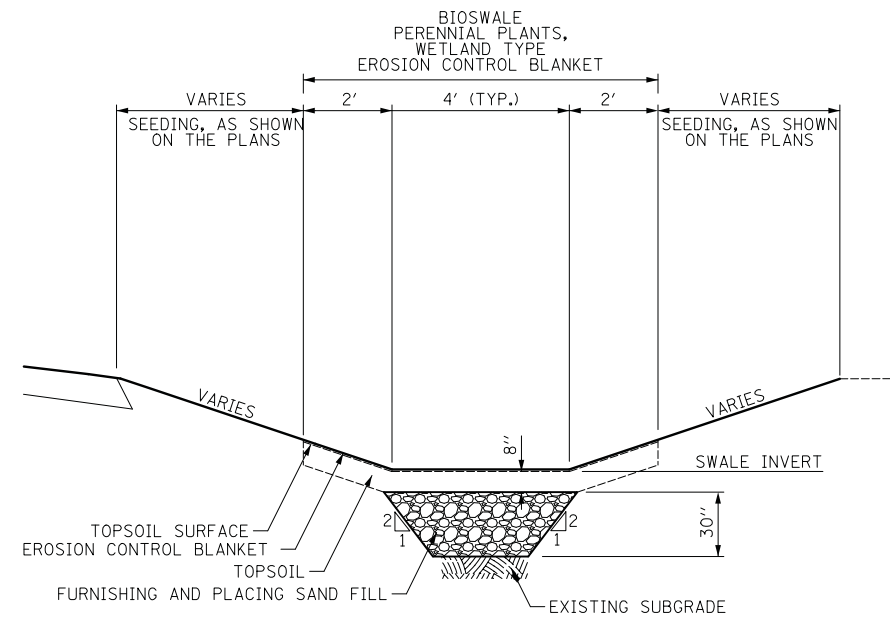
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	223
CONTRACT NO. 60R52				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

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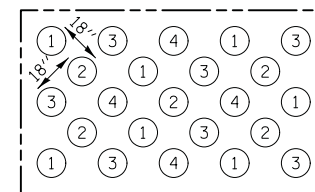
BIOSWALE PLAN VIEW AND END TREATMENT



SECTION A-A - BIOSWALE
SCALE = N.T.S.

PERENNIAL PLANT, WETLAND TYPE PLANT LIST

PLANT NO	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QUANTITY
1	CAREX SCOPARIA	POINTED BROOM SEDGE	2" DIA.x4" DEEP PLUG	18" O.C.	800
2	CHASMANTHIUM LATIFOLIUM	NORTHERN SEA OATS	2" DIA.x4" DEEP PLUG	18" O.C.	800
3	EUPATORIUM PERFORIATUM	BONESET	2" DIA.x4" DEEP PLUG	18" O.C.	800
4	VERBENA HASTATA	BLUE VERVAIN	2" DIA.x4" DEEP PLUG	18" O.C.	800



① PERENNIAL PLANT, PLANT NO. FROM PLANT LIST THIS SHEET

TYPICAL PLANT SPACING AND LAYOUT

NOTES:

- BIOSWALE PLUGS TO BE PLANTED AT 18" ON CENTER IN DIRECTIONS OF LENGTH AND WIDTH.
- BIOSWALE PLUG SPECIES SHALL BE EQUALLY MIXED SUCH THAT LIKE VARIETIES ARE NOT ADJACENT TO EACH OTHER.
- PLANT LAYOUT AND DIMENSIONS MAY VARY TO FIT FIELD CONDITIONS.

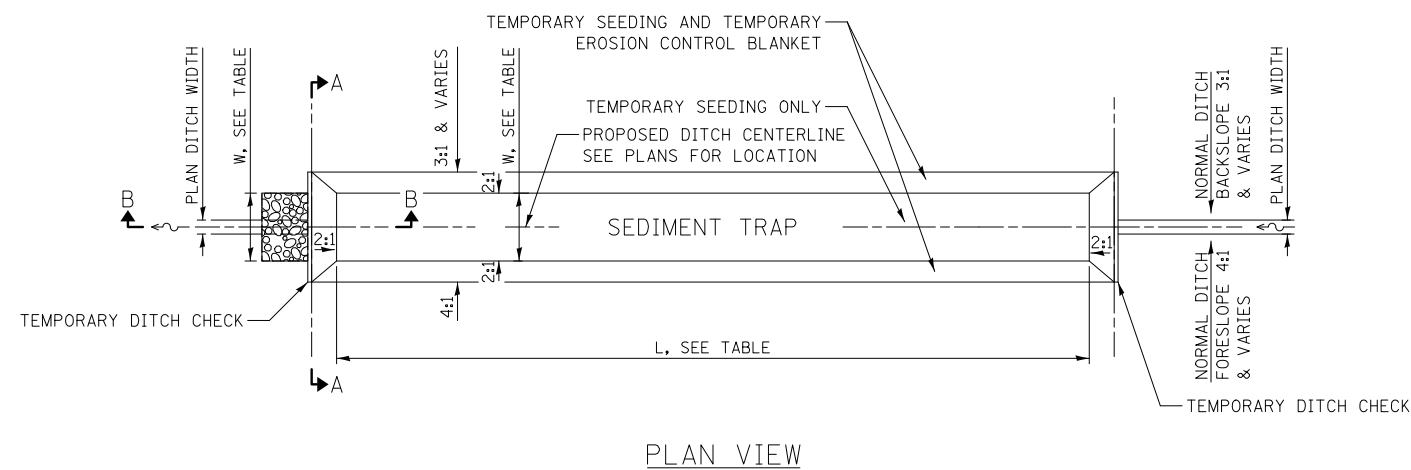
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		DRAWN - KWH	REVISED -
		CHECKED - JRV	REVISED -
		DATE - 1/30/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

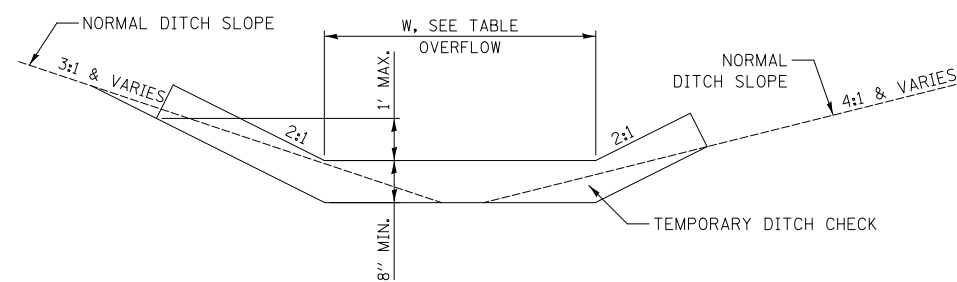
LANDSCAPING DETAILS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS

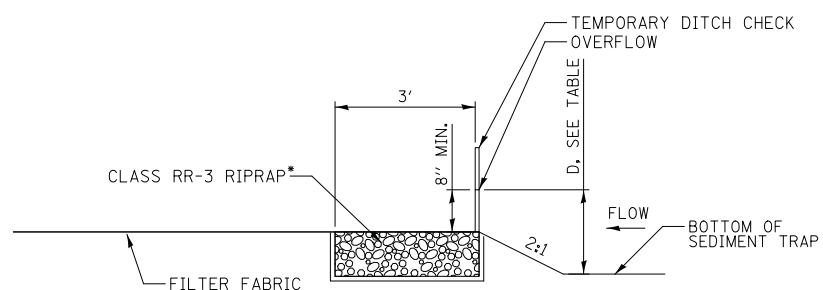
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	224
CONTRACT NO. 60R52				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



PLAN VIEW



SECTION A-A



*PAID FOR AS "AGGREGATE (EROSION CONTROL)".

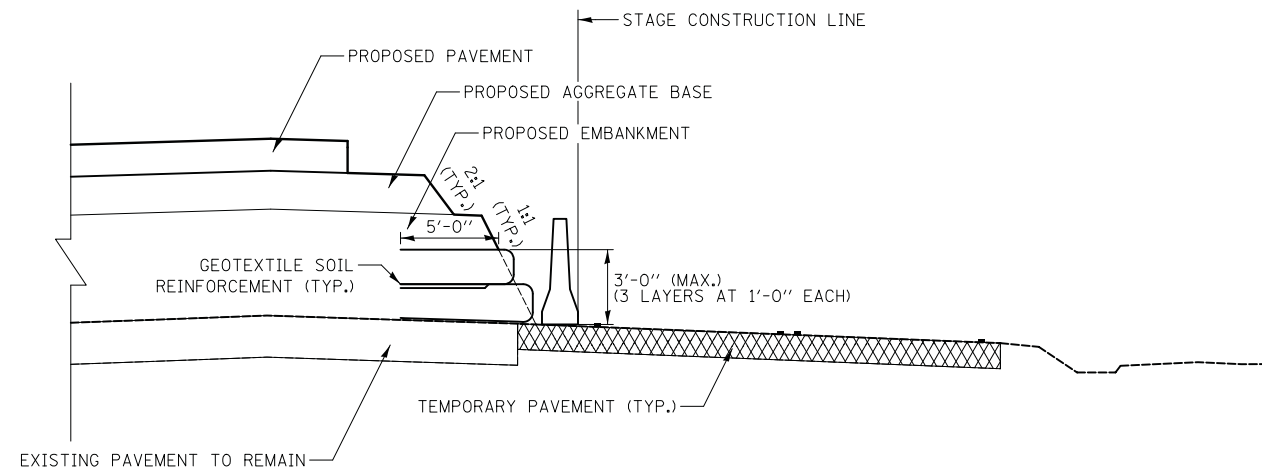
SECTION B-B

NOTES:

1. THE UNIT WEIGHT USED TO CALCULATE RR-3 STONE IS 150 POUNDS/CU FT.
2. CONTRACTOR MAY ELECT TO USE AGGREGATE DITCH CHECK IN PLACE OF TEMPORARY DITCH CHECK. AGGREGATE DITCH CHECK SHOULD CONFORM TO THE MATERIALS AND DIMENSIONS SHOWN ON STANDARD PLAN 280001-07. COARSE AGGREGATE SHALL BE CA-3 AND RIPRAP SHALL BE RR-3.
3. SEE EROSION AND SEDIMENT CONTROL SHEETS FOR LOCATIONS OF SEDIMENT TRAPS.

SEDIMENT TRAP DIMENSION TABLE

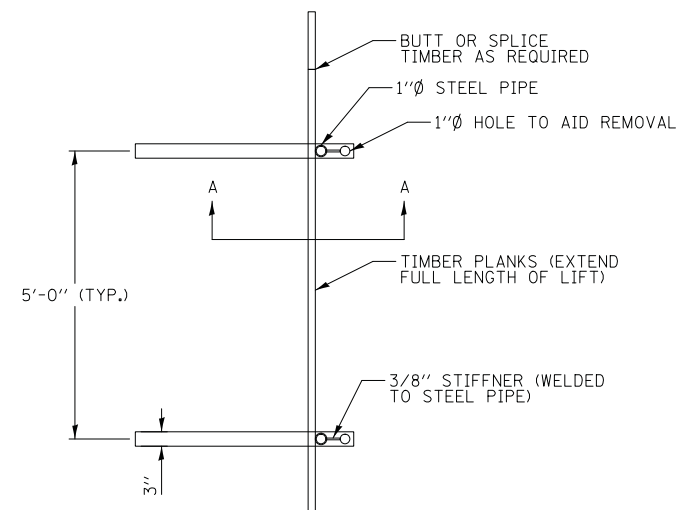
SEDIMENT TRAP ID	WIDTH W	LENGTH L	DEPTH D
1	14	85	2
2	10	115	2
3	10	115	2
4	10	115	2
5	10	60	2
6	10	60	2
7	10	50	2
8	10	50	2
9	16	90	2
10	16	90	2
11	10	100	2
12	10	100	2
13	10	75	1.5
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15	10	90	2
16	10	100	2
17	10	100	2
18	14	85	2
19	14	85	2



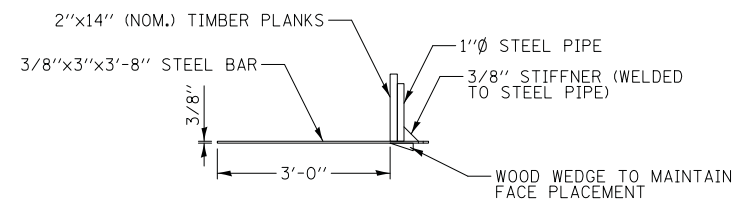
TEMPORARY SOIL RETENTION SYSTEM - TYPICAL SECTION

NOTES:

1. THE GEOTEXTILE SOIL REINFORCEMENT SHALL HAVE A MINIMUM ALLOWABLE TENSILE STRENGTH (T MIN.) OF 270 LB./IN. AS DETERMINED BY THE PROCEDURE DESCRIBED IN THE SPECIAL PROVISION. THE COMPUTATIONS SUPPORTING DETERMINATION OF T MIN. SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE RE-EMBEDMENT LENGTH SHALL BE A MINIMUM OF 5 FEET.
3. THE FORM BRACE DETAIL SHOWN IS FOR REFERENCE ONLY. THE CONTRACTOR MAY CHOOSE TO UTILIZE A DIFFERENT SYSTEM OR CONFIGURATION.
4. THE CONTRACTOR AND ENGINEER SHALL DETERMINE THE REQUIREMENT FOR THE TEMPORARY SOIL RETENTION SYSTEM AND MAY ALTER THE LIMITS OF THE SYSTEM BASED ON CONDITIONS IN THE FIELD AND THE CONSTRUCTION STAGING.

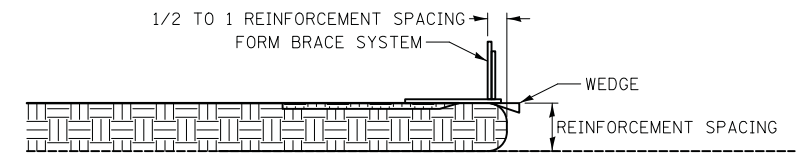


FORM BRACE - PLAN

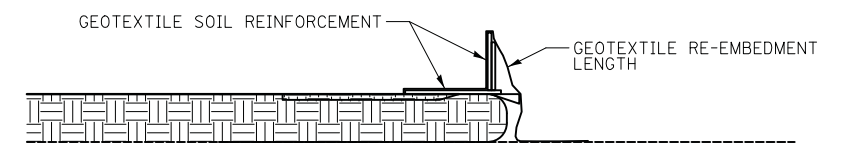


FORM BRACE - SECTION A-A

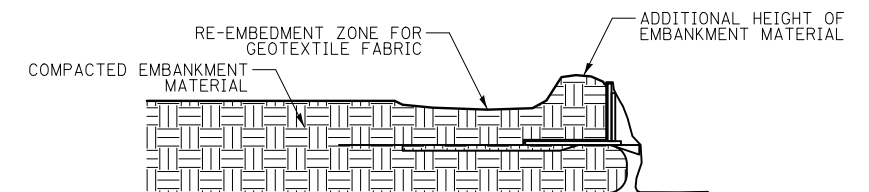
FORM BRACE DETAIL



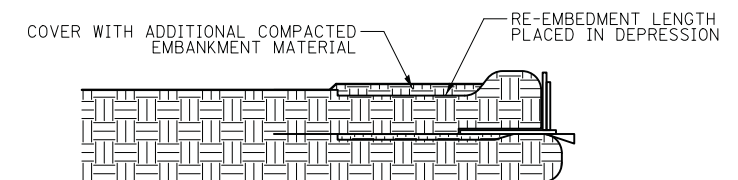
STEP 1. PLACE FORM BRACE ON COMPLETED REINFORCEMENT LEVEL. KEEP THE FACE OF THE FORM BRACE BACK FROM THE FABRIC FACE A DISTANCE OF 1/2 TO 1 TIMES THE GEOTEXTILE REINFORCEMENT SPACING.



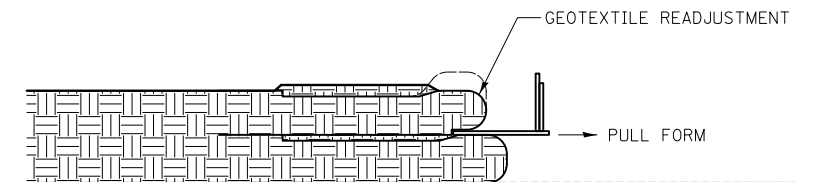
STEP 2. POSITION FABRIC SO THE REQUIRED GEOTEXTILE RE-EMBEDMENT LENGTH EXTENDS OVER THE TOP OF THE FORM BRACE AND THE DESIGN REINFORCEMENT WIDTH IS PLACED WITH NO SLACK AGAINST THE PREVIOUS LEVEL.



STEP 3. COMPACT EMBANKMENT MATERIAL IN LIFTS AND CREATE A DEPRESSION IN THE RE-EMBEDMENT ZONE OF ±3 INCHES. PLACE ADDITIONAL EMBANKMENT MATERIAL AGAINST THE FORM BRACE.



STEP 4. FOLD GEOTEXTILE RE-EMBEDMENT LENGTH BACK OVER THE FORM BRACE INTO THE RE-EMBEDMENT ZONE WHERE THE DEPRESSION WAS MADE. PLACE ADDITIONAL EMBANKMENT MATERIAL ON TOP OF THE RE-EMBEDMENT GEOTEXTILE TO ANCHOR IT AND GRADE AND COMPACT IT TO THE FINAL LIFT HEIGHT.



STEP 5. PULL THE FORM BRACE OUTWARD ALLOWING GEOTEXTILE FACE TO SLIGHTLY READJUST TO FORM TIGHT ROUND FACE LEVEL WITH PLAN REINFORCEMENT SPACING.

TYPICAL CONSTRUCTION SEQUENCE

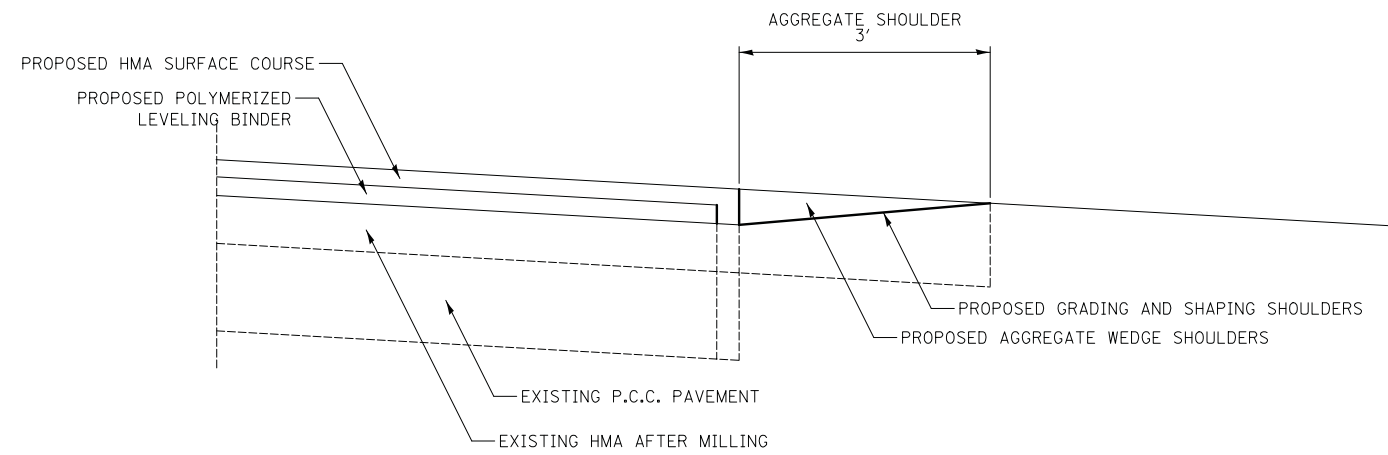
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		CHECKED - JRV	REVISED -
		DATE - 1/30/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TEMPORARY SOIL RETENTION SYSTEM DETAIL

SCALE: NONE SHEET NO. 1 OF 1 SHEETS

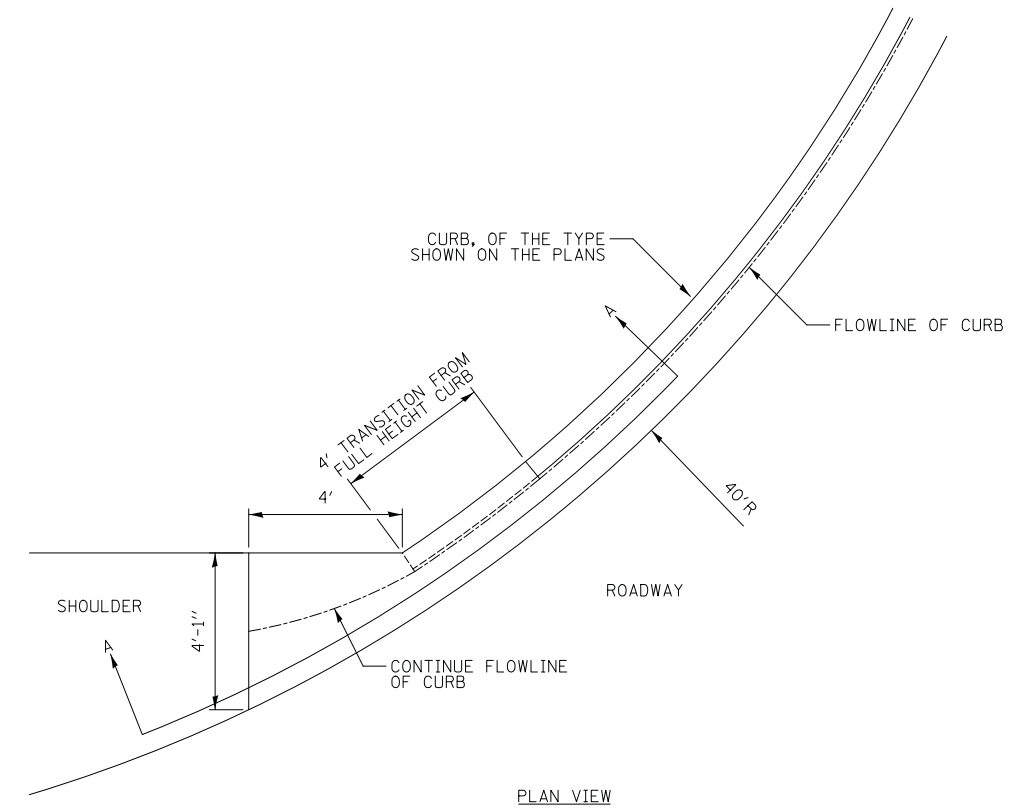
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	226
CONTRACT NO. 60R52				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



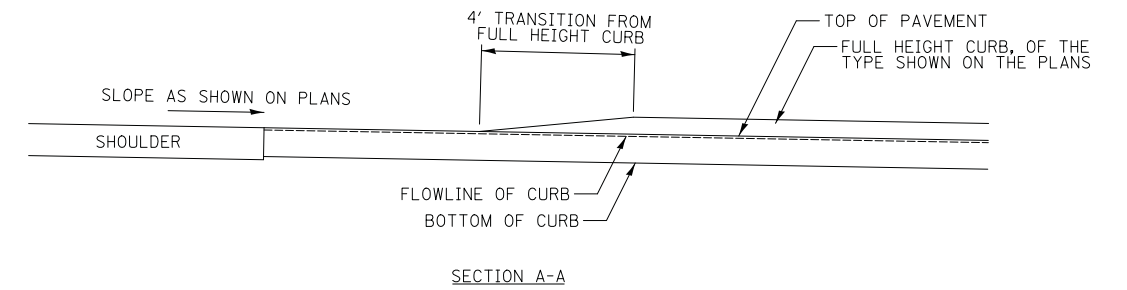
GRADING AND SHAPING SHOULDER DETAIL

NOTES:

1. THE EXISTING AGGREGATE SHOULDER SHALL BE REGRADED AND COMPACTED IN PLACE.
2. ADDITIONAL AGGREGATE REQUIRED TO BRING THE TOP OF THE SHOULDER TO GRADE SHALL BE PLACED AND COMPACTED. THE ADDITIONAL AGGREGATE SHALL BE PAID AS "AGGREGATE WEDGE SHOULDERS", OF THE TYPE SPECIFIED.



PLAN VIEW



SECTION A-A

CURB TRANSITION DETAIL

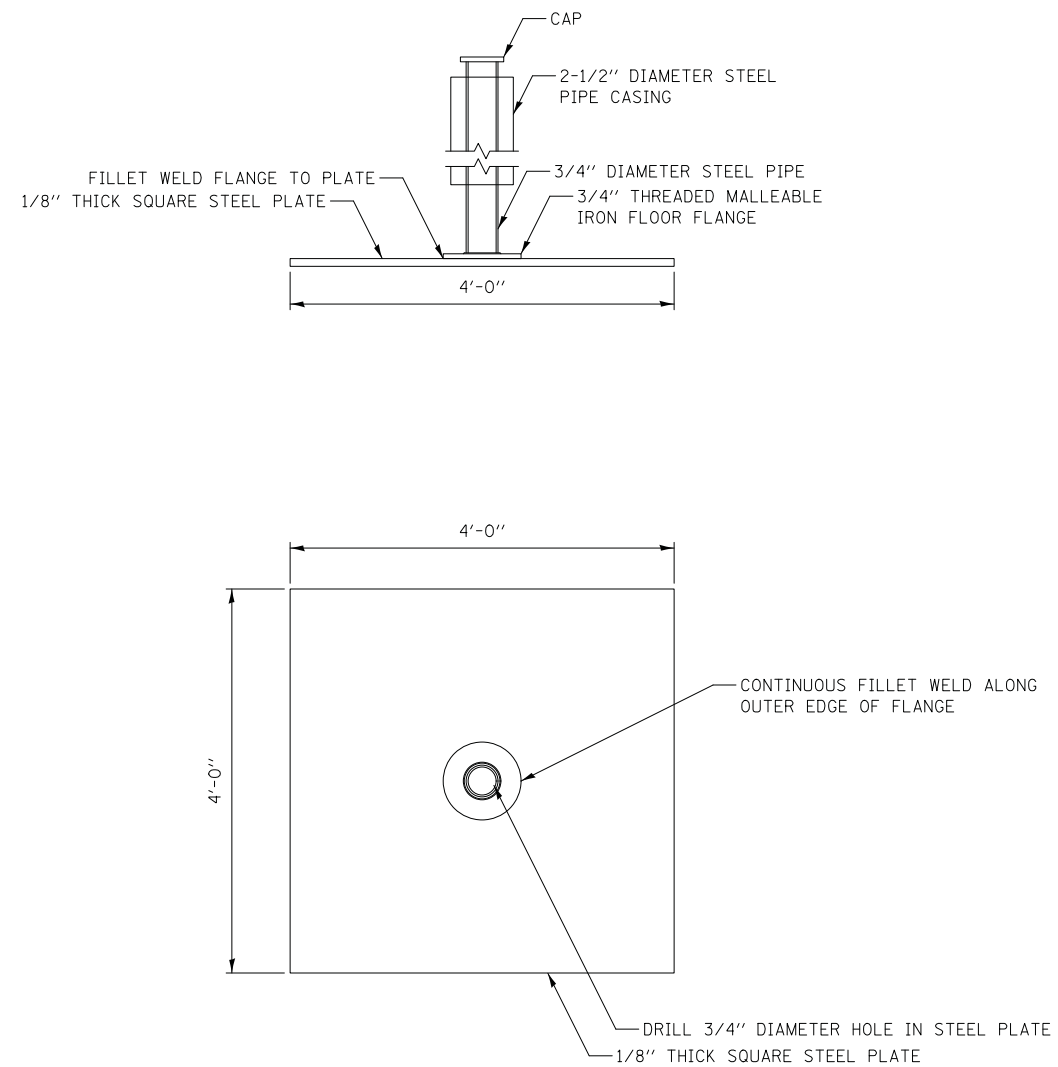
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	PLOT DATE = 1/31/2019	DATE - 1/30/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GRADING AND SHAPING SHOULDERS AND
CURB TRANSITION DETAIL**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	227
CONTRACT NO. 60R52				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SETTLEMENT PLATFORM DETAIL

NOTES:

1. THE CASING PIPE SHALL BE INSTALLED WITH A VERTICAL SEPARATION OF AT LEAST 4 INCHES BETWEEN THE BOTTOM OF THE CASING PIPE AND THE TOP OF THE STEEL PLATE.
2. FIELD WELDING SHALL BE ALLOWED.

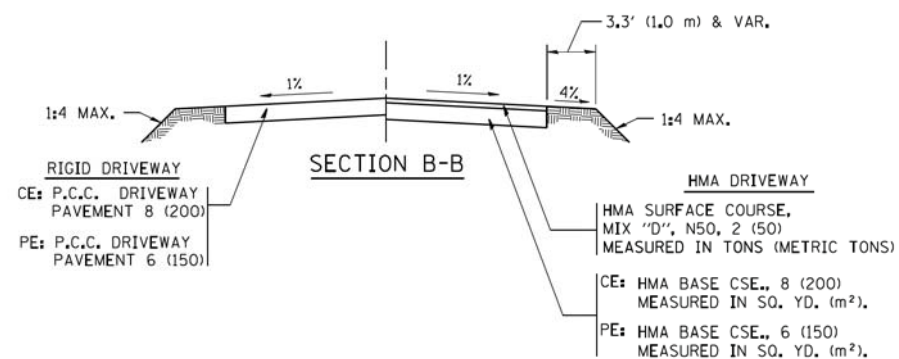
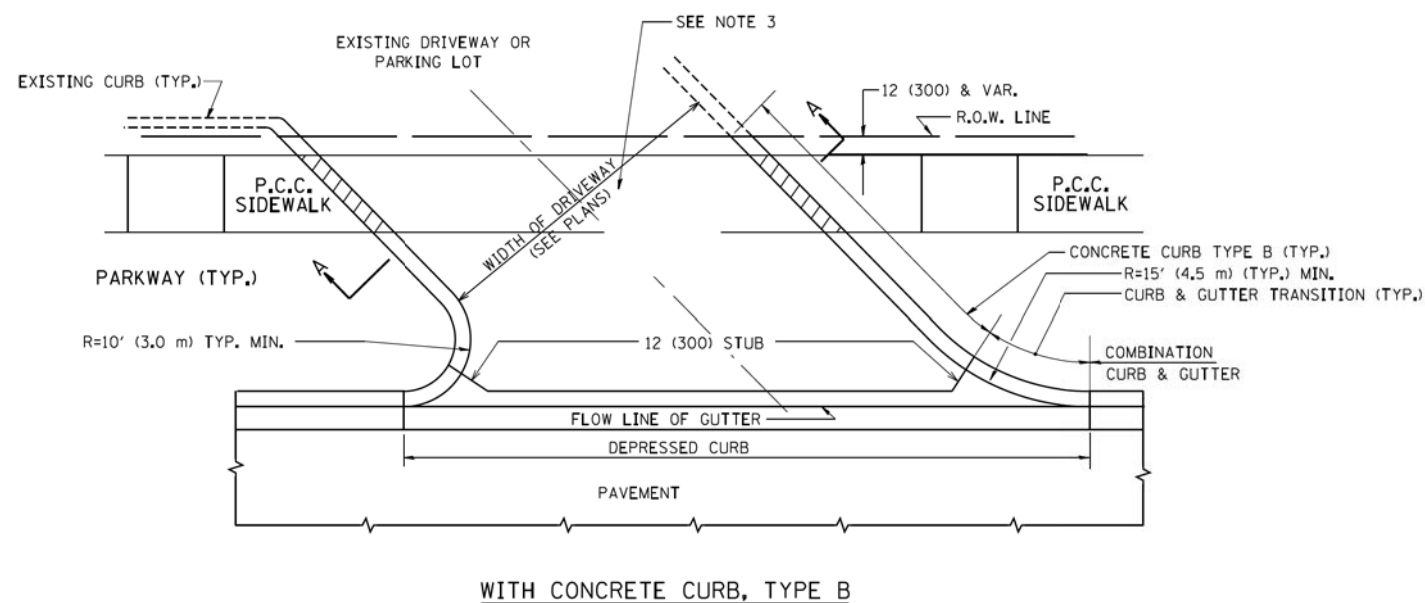
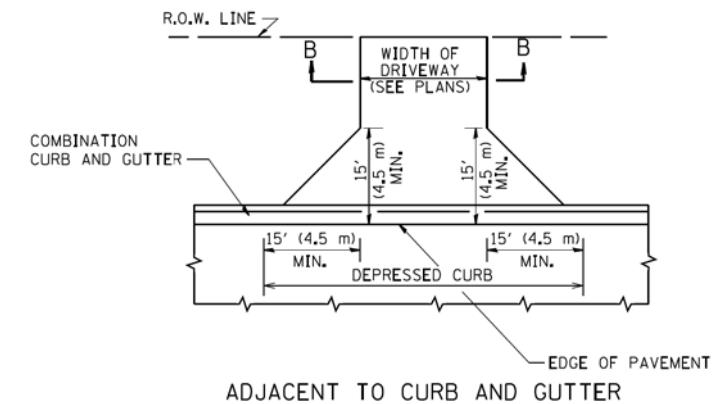
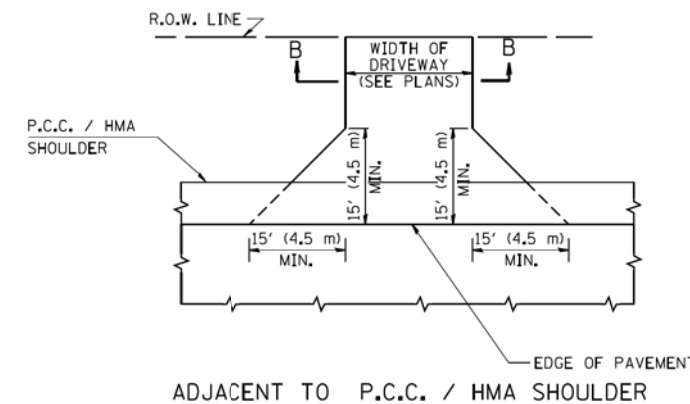
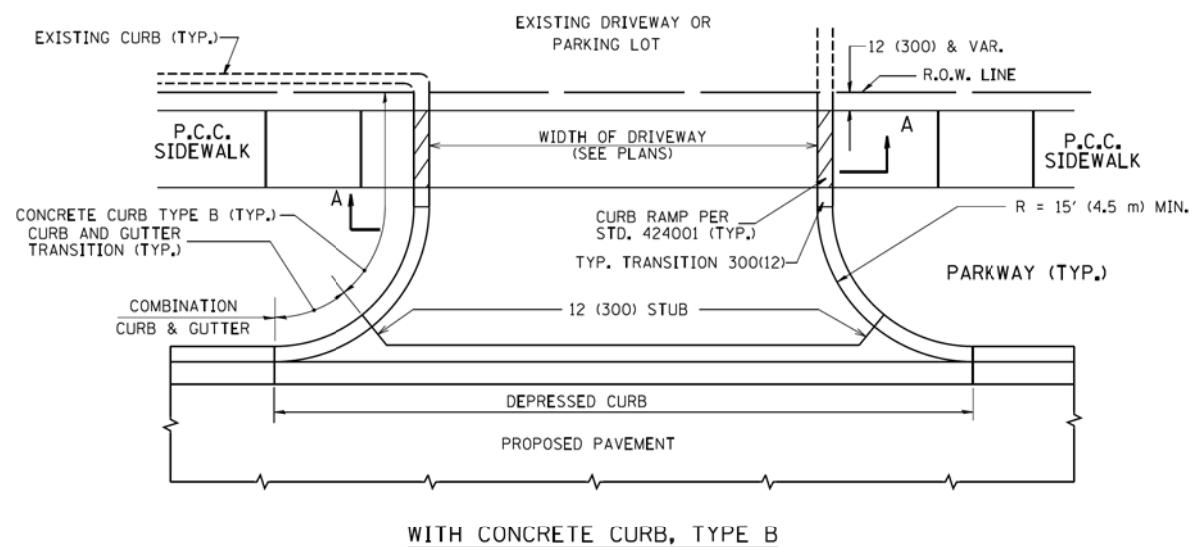
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		DATE - 1/30/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SETTLEMENT PLATFORM DETAIL

SCALE: NONE SHEET NO. 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	228
CONTRACT NO. 60R52				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



RURAL FIELD ENTRANCE (FE)
 HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)
 AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

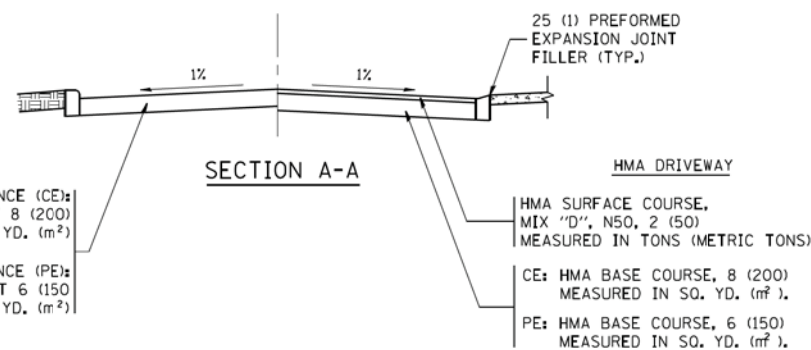
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

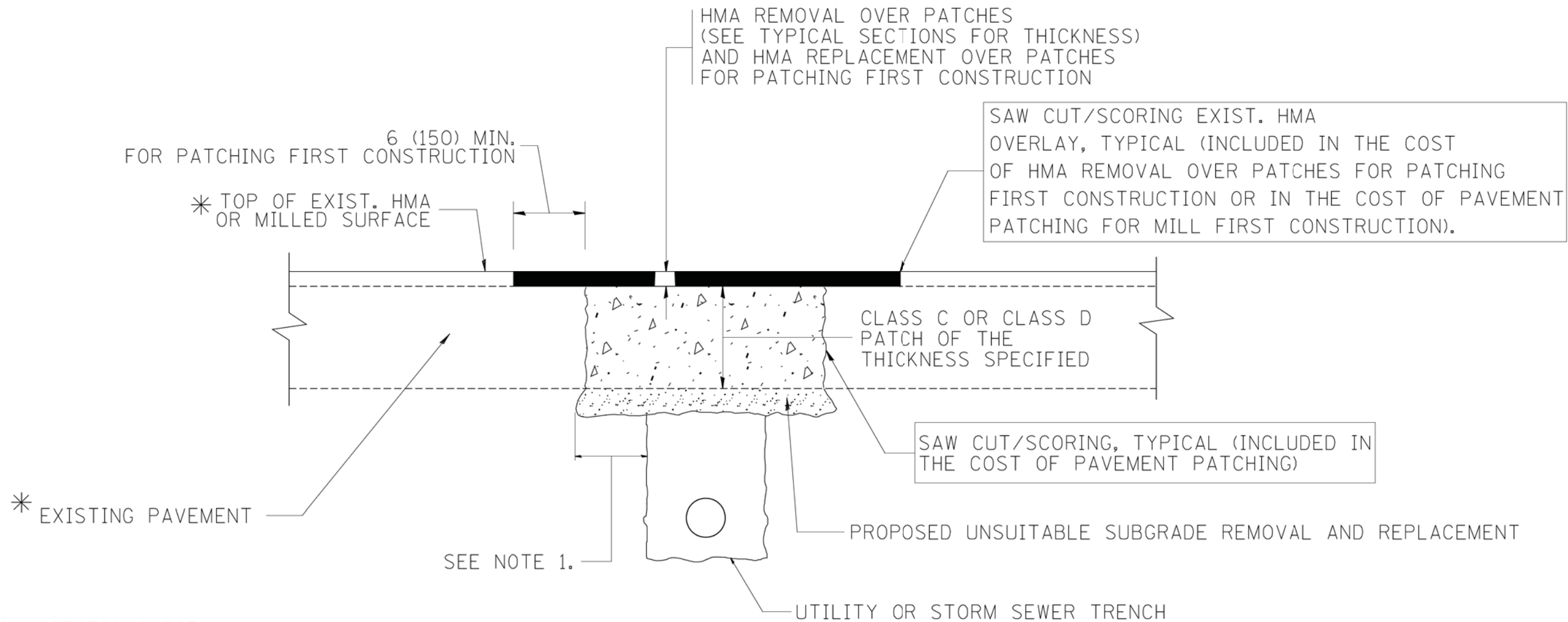


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ct:\pw\work\p\dot\lrysa\d0108315\bd01.dgn		DRAWN -	REVISED - R. BORO 01-01-07
		CHECKED -	REVISED - R. BORO 06-11-08
		DATE - 11-04-95	REVISED - R. BORO 09-06-11

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	229
BD0156-07 (BD-01)		CONTRACT NO. 60R52		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

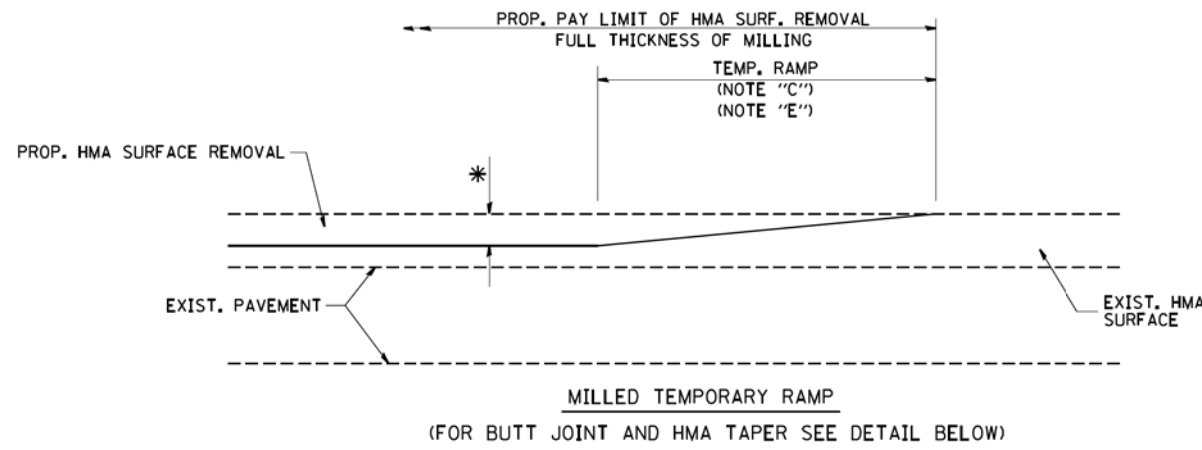
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

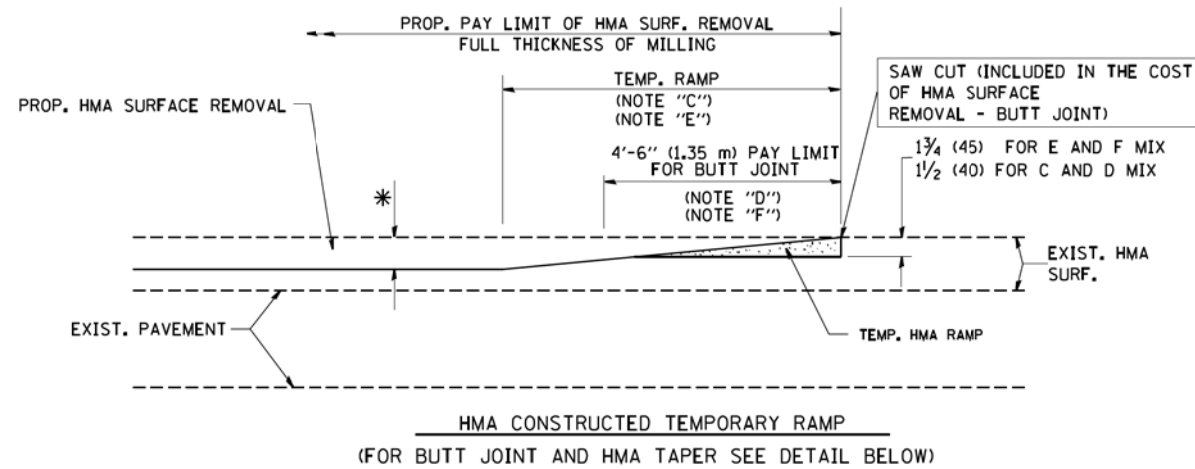
1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	297	33B (B-R) & 33X-RS-2	WILL	275	230
		PLOT SCALE = 50.000' / IN.	REVISED - R. BORO 09-04-07						BD400-04 (BD-22)		CONTRACT NO. 60R52		
		PLOT DATE = 10/27/2008	REVISED - K. ENG 10-27-08						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

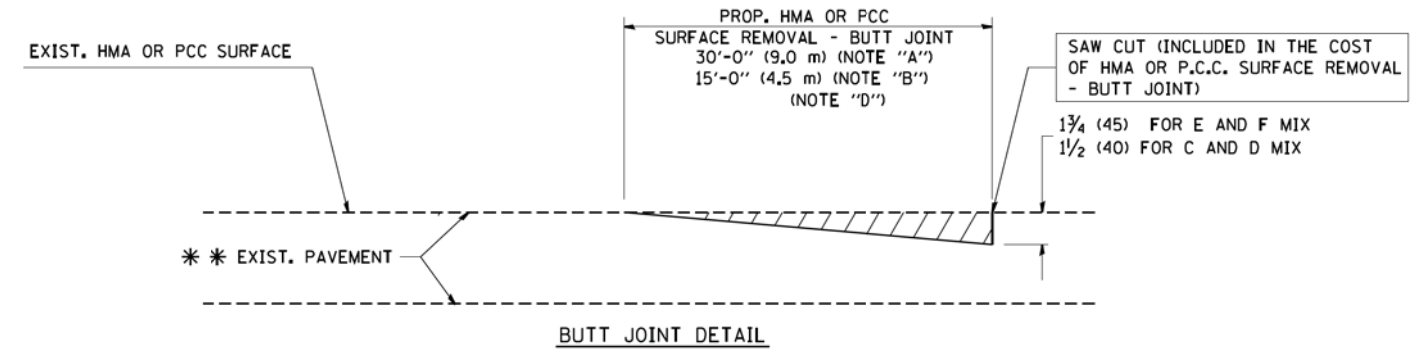


OPTION 1

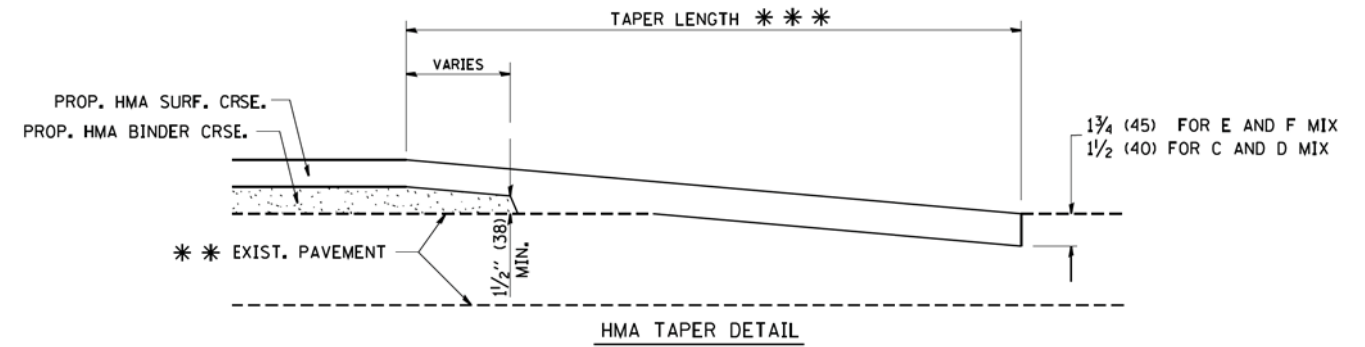


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

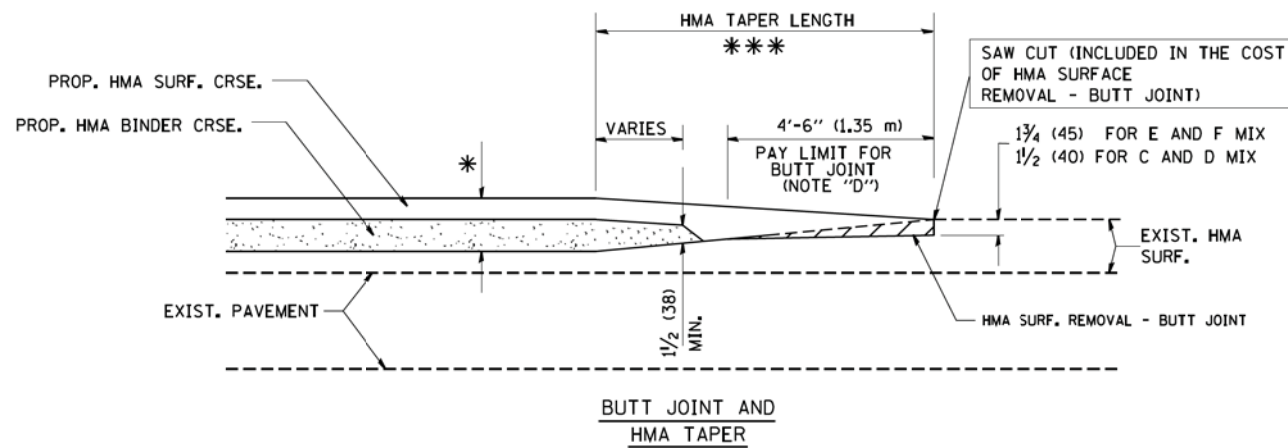
* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

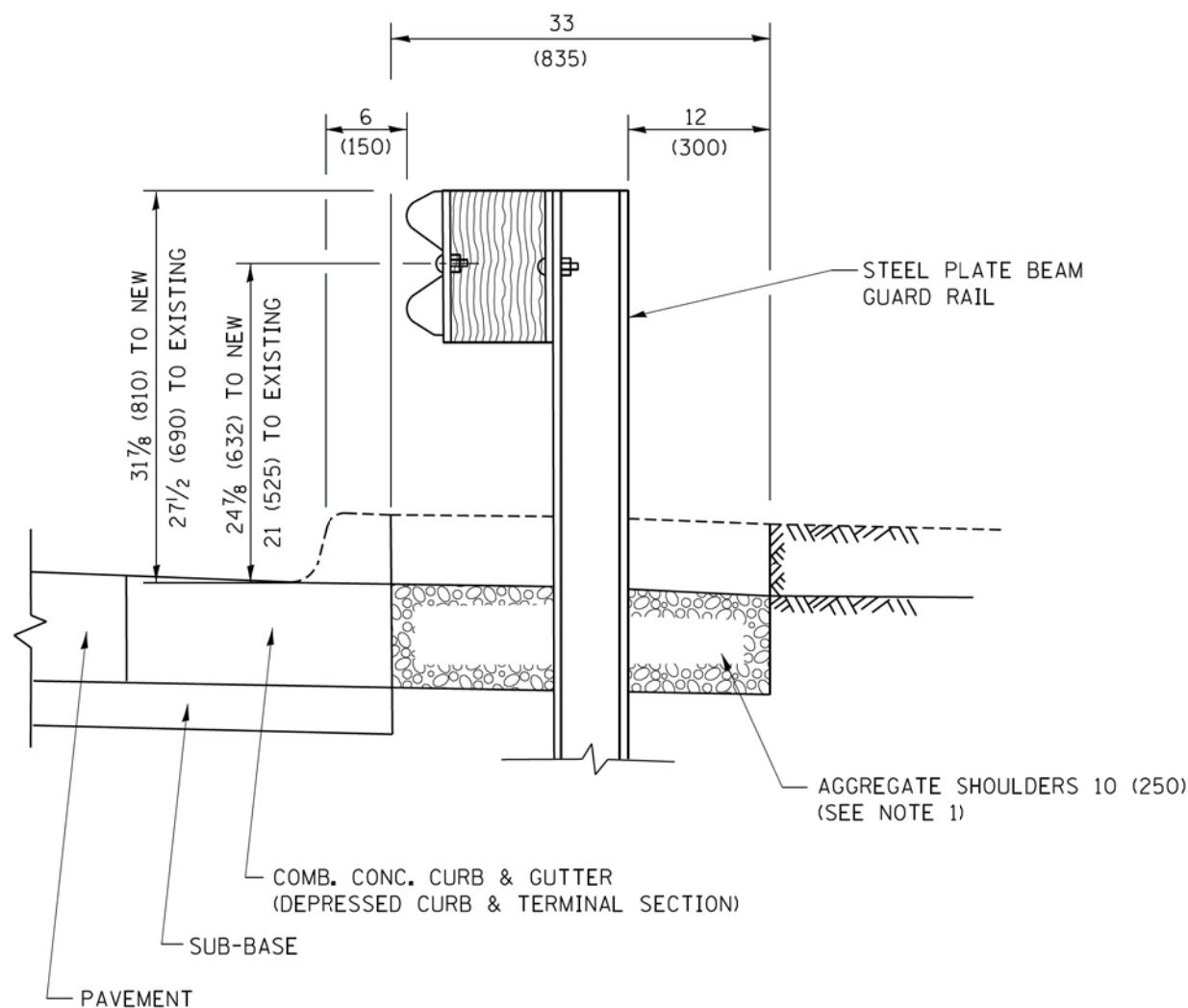


TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

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		DRAWN -	REVISED - A. ABBAS 03-21-97
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	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

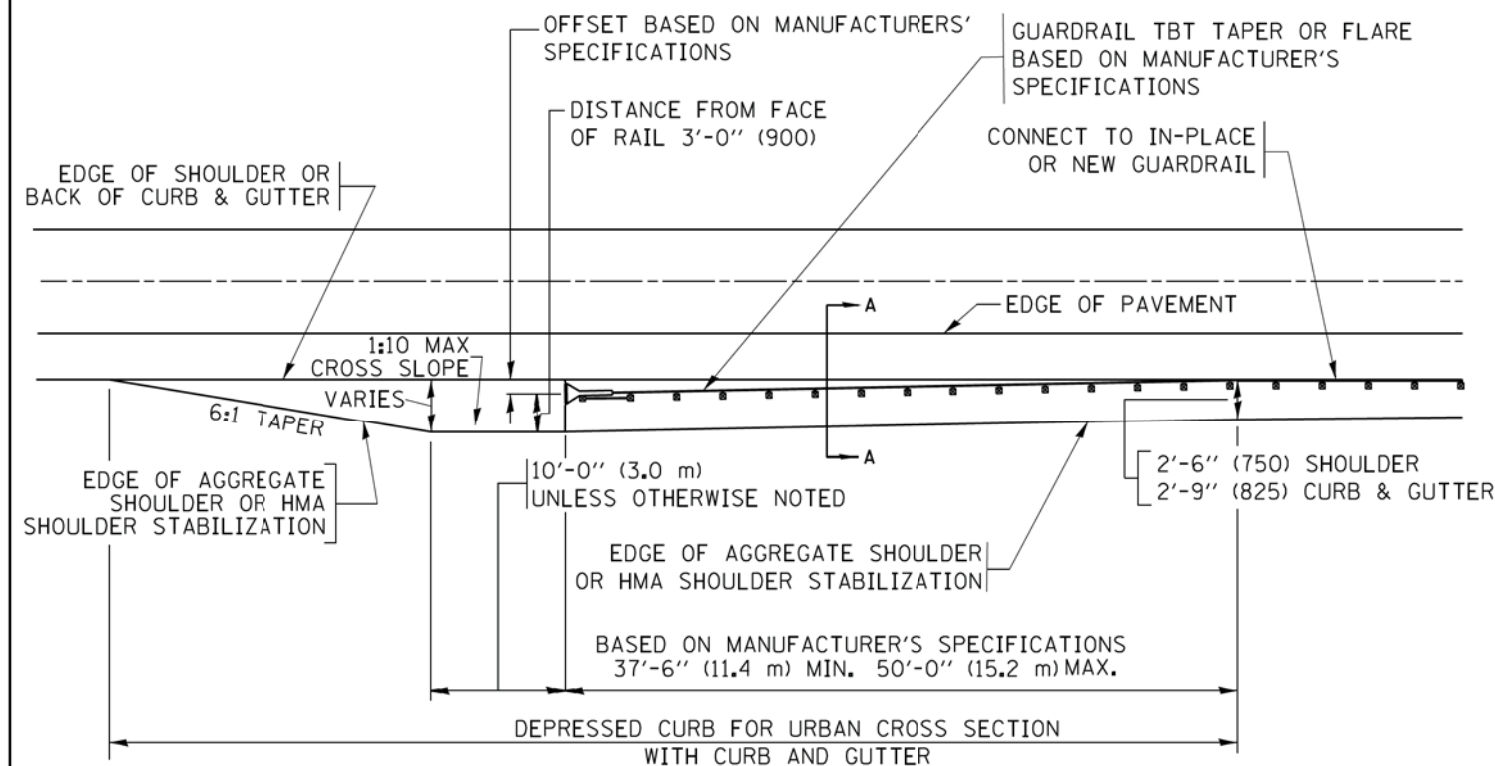
BUTT JOINT AND HMA TAPER DETAILS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	297	33B (B-R) & 33X-RS-2	WILL	275	231
STA.	TO STA.	BD400-05 BD32		CONTRACT NO. 60R52		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						



SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

DETAILS FOR STEEL PLATE BEAM
GUARD RAIL ADJACENT TO CURB AND GUTTER
 [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



DEPRESSED CURB AND GUTTER AND
SHOULDER TREATMENT AT TBT TY. 1 SPL.

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL
 ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
 UNLESS OTHERWISE SHOWN.

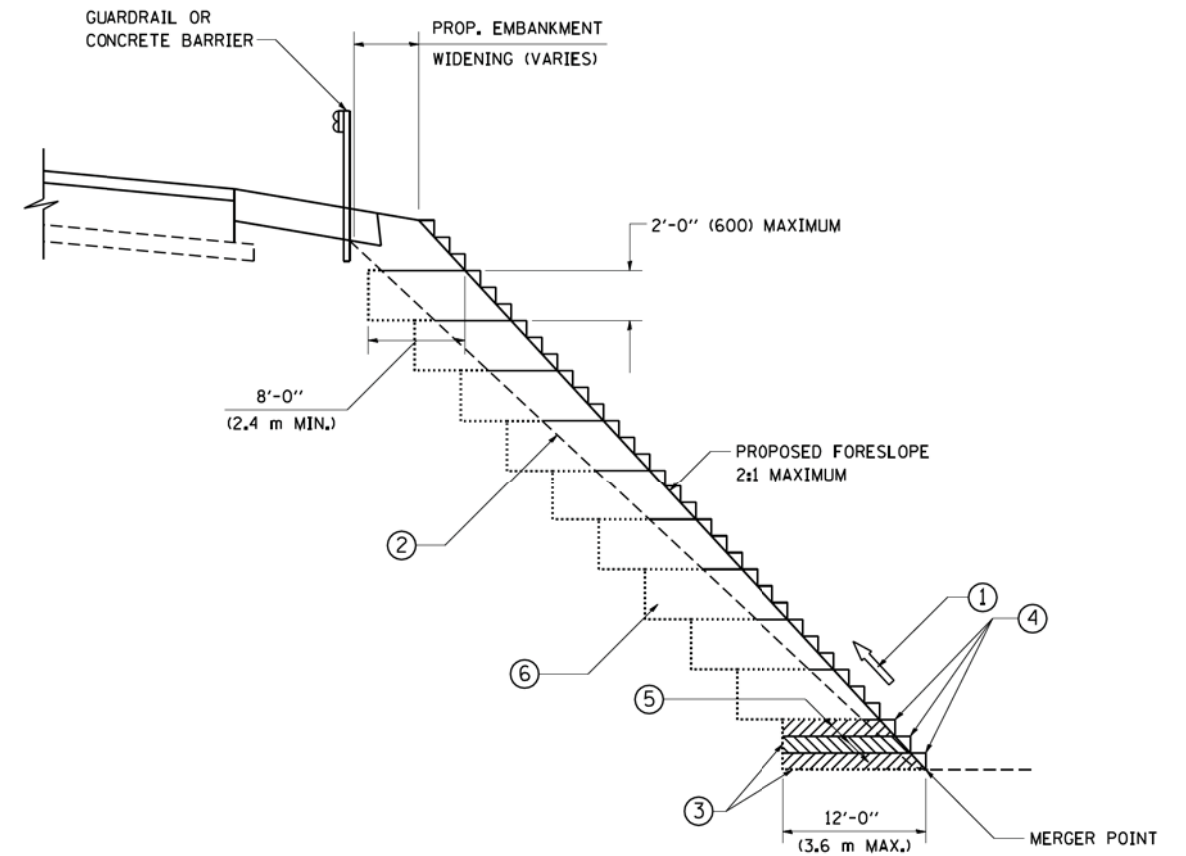
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	PLOT SCALE = 50,0000 / 1 in.	CHECKED -	REVISED - R. BORO 08-06-2012
Default	PLOT DATE = 12/21/2015	DATE - 09-22-90	REVISED - R. BORO 05-08-2015

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DETAILS FOR DEPRESSED CURB & GUTTER AND
 SHOULDER TREATMENT AT TBT TY. 1 SPL.

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	232
BD600-10 (BD 34)		CONTRACT NO. 60R52		
ILLINOIS FED. AID PROJECT				



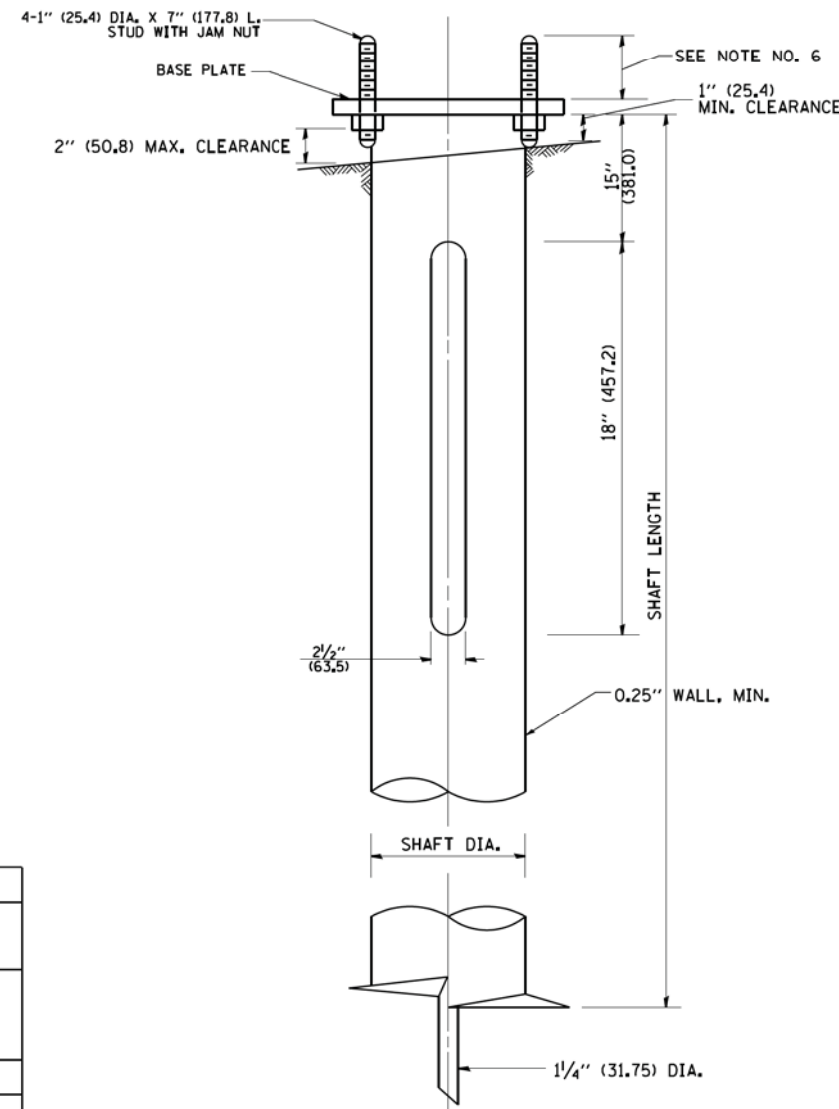
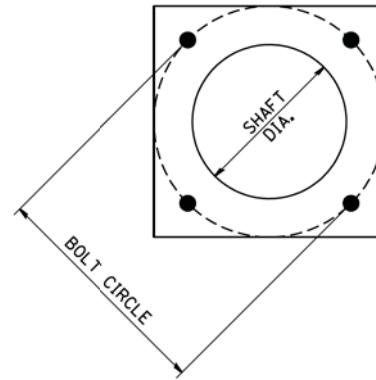
**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

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PLOT DATE = 1/4/2008	DATE = 06-16-04	REVISED -	REVISED -					BD-51		CONTRACT NO. 60R52	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT											



HELIX FOUNDATION SIZE

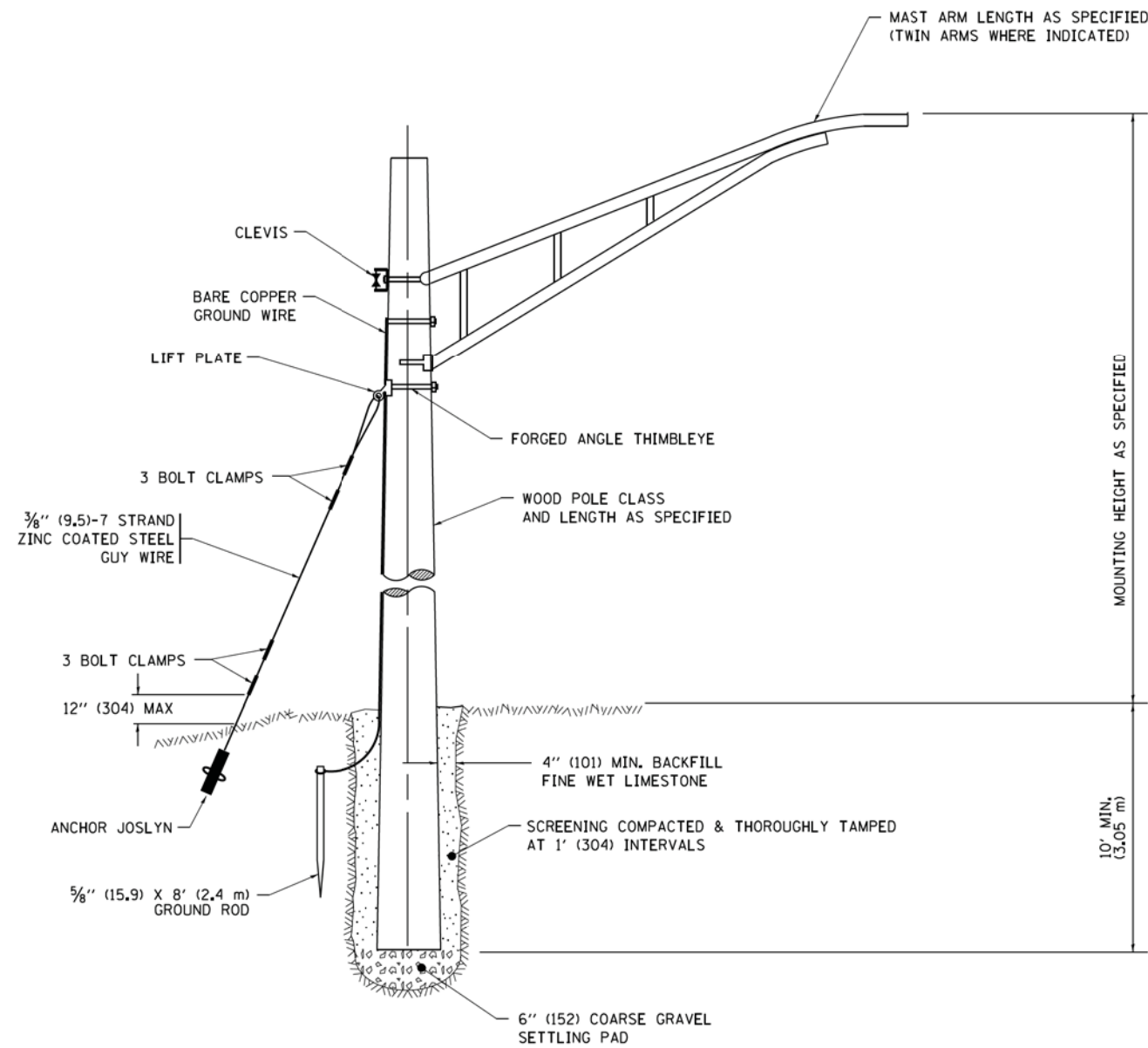
POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	1 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	1 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

METAL HELIX FOUNDATION MATERIALS

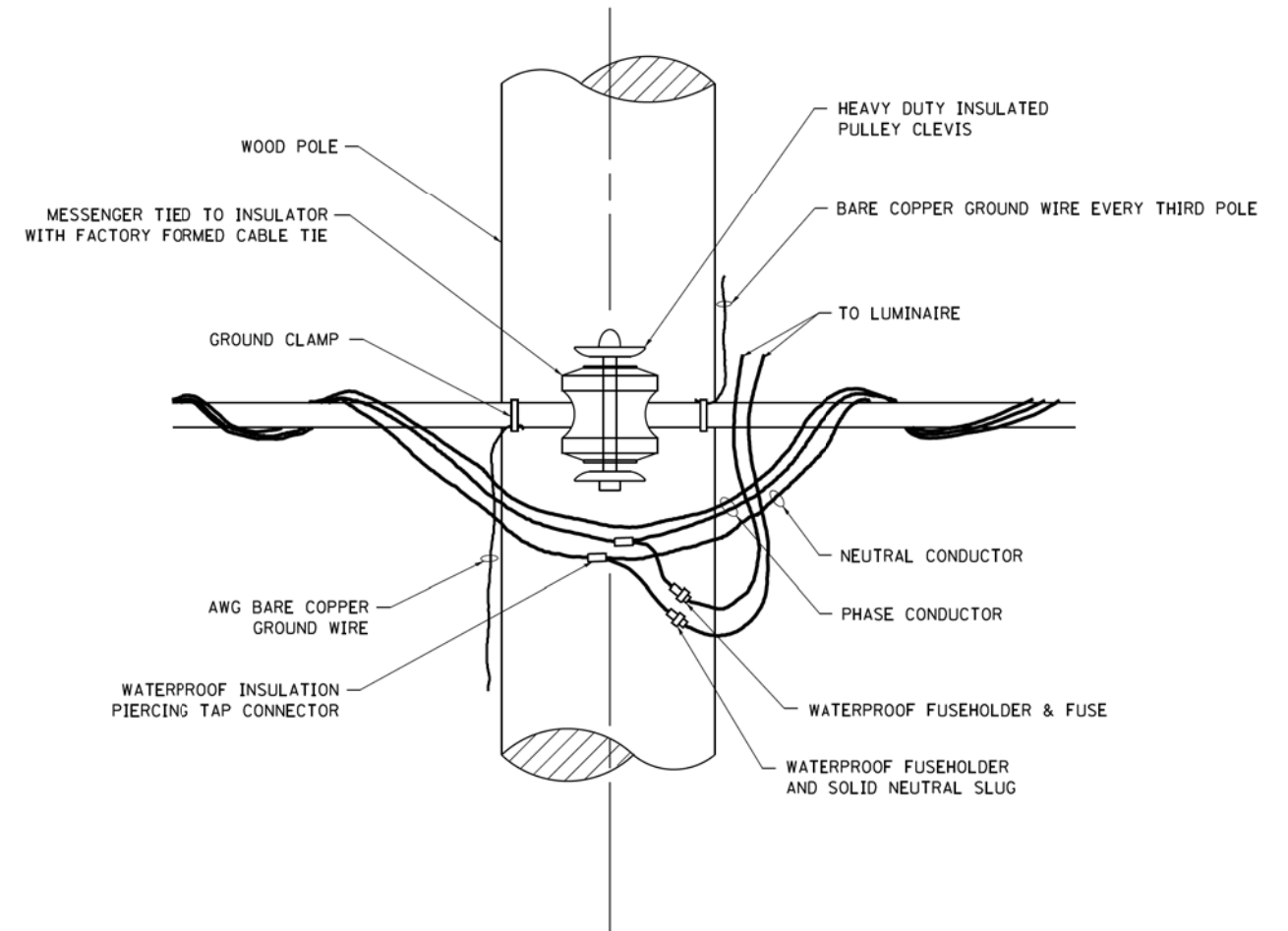
ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

NOTES:

- ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDATION IS NOT ALLOWED.
- THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS ($\pm 1^\circ$) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
- THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE ($\pm 2^\circ$).
- THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.



TEMPORARY LIGHT POLE DETAIL

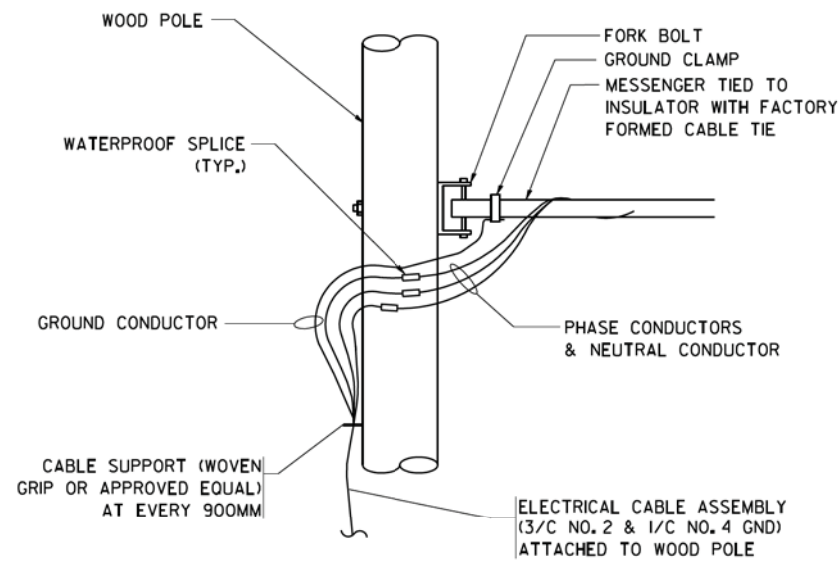


TEMPORARY LIGHT POLE ATTACHMENT DETAIL

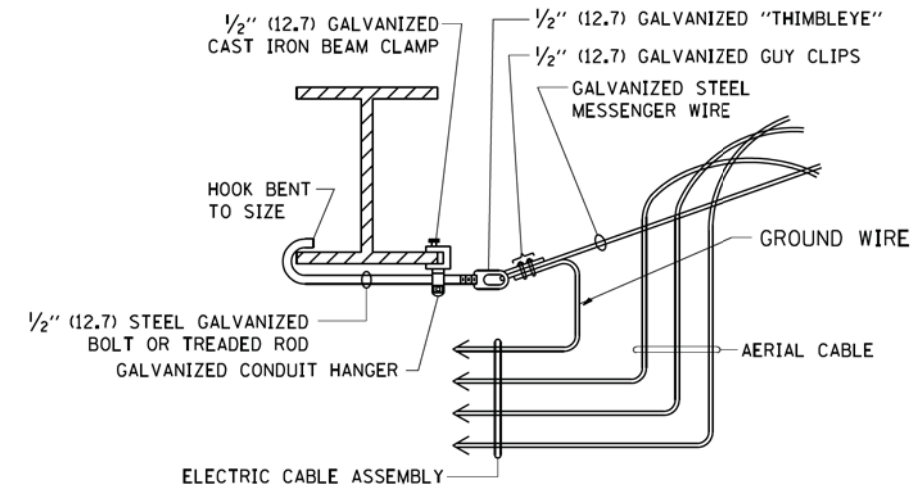
NOTE:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHT POLE DETAILS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\l\084EBIDINTEG\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\Dist 1\CADD\Detail\CAD\Sheets\be800.dgn	DRAWN	REVISOR - R.T. 07-26-16	297					33B (B-R) & 33X-RS-2	WILL	275	235	
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	PLOT DATE = 9/1/2016	DATE -	REVISOR -		SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	



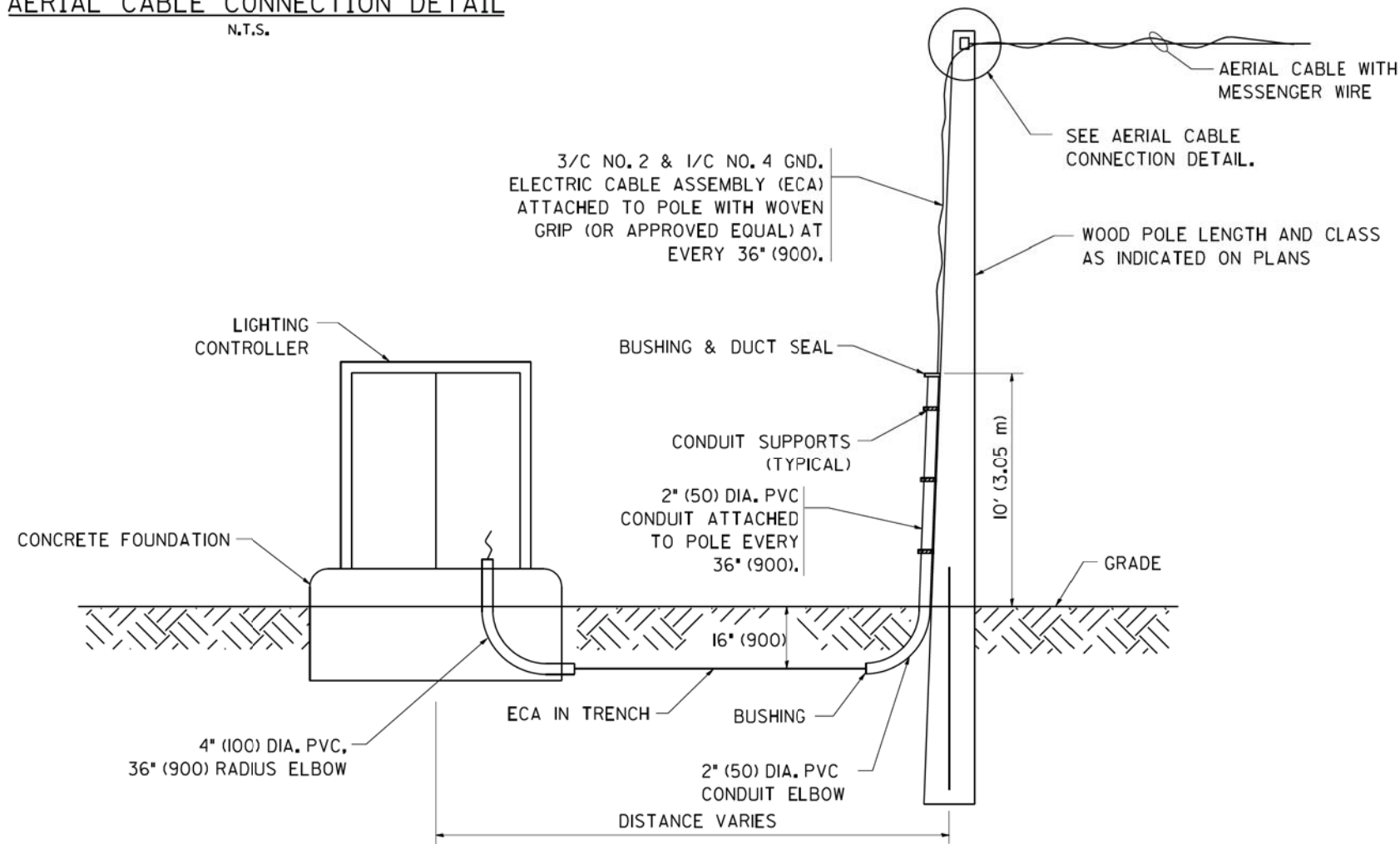
AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE

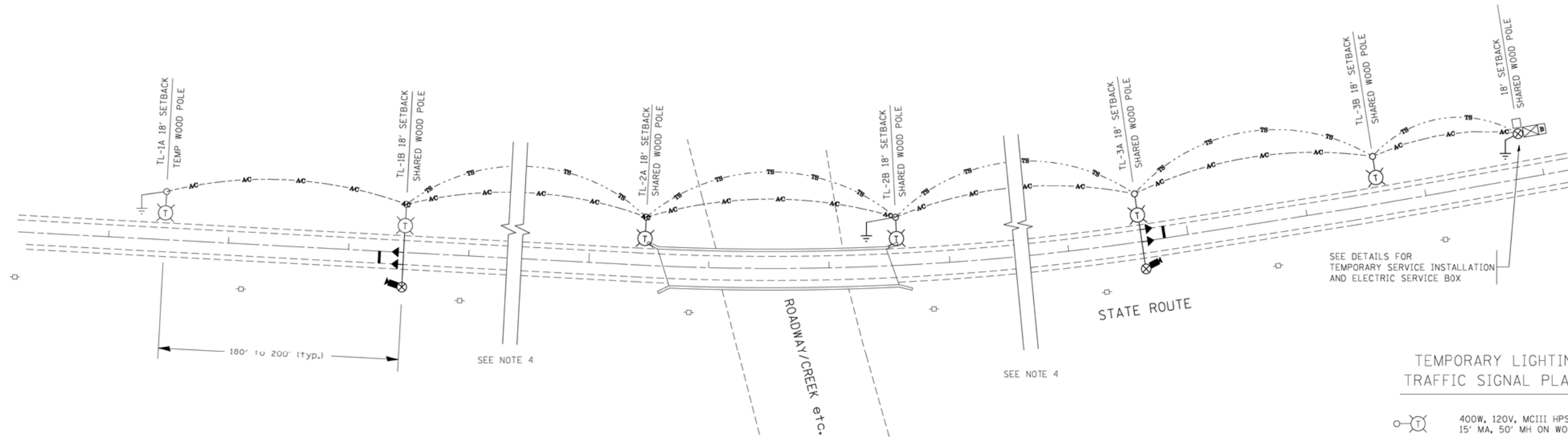
NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

FILE NAME = W:\diststd\22x34\be801.dgn	USER NAME = gegljanobt	DESIGNED - DRAWN -	REVISED - 08-08-03 REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY AERIAL CABLE INSTALLATION			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -	REVISED -		297	33B (B-R) & 33X-RS-2	WILL	275	236			
PLOT DATE = 1/4/2008	DATE -	REVISED -	REVISED -		BE-801		CONTRACT NO. 60R52					
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



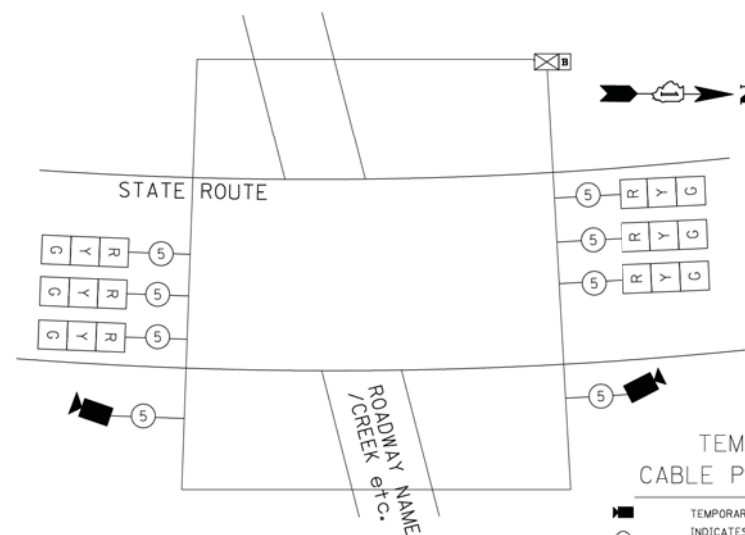
TYPICAL LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS
NOT TO SCALE

GENERAL NOTES:

- CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
- UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 750-WATT TYPE III HIGH PRESSURE SODIUM HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.
- THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED
- THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE, DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED
- THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.
- THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
- ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.

TEMPORARY LIGHTING AND TRAFFIC SIGNAL PLAN LEGEND

- 400W, 120V, MCIII HPS. WITH PHOTO CELL 15' MA, 50' MH ON WOOD POLE, CLASS 4
- 3-1/2" #2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
- TL-1A TEMPORARY LIGHTING UNIT NUMBER - ONE CIRCUIT A
- GROUND ROD 5/8" DIA. x 10'
- COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
- TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4
- TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER OF SECTION AND DISPLAY AS REQUIRED.
- TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED.
- TEMPORARY TRAFFIC CONTROLLER WITH UPS AND BOTTOM PLATE MOUNTED TO WOOD POLE
- TEMPORARY VIDEO DETECTOR



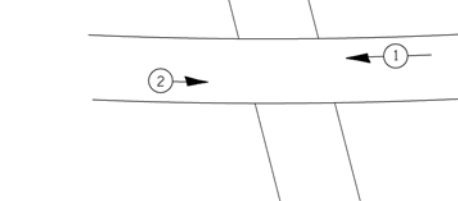
TEMPORARY CABLE PLAN (TYPICAL)
NOT TO SCALE

TEMPORARY CABLE PLAN LEGEND

- TEMPORARY VIDEO DETECTOR
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300 mm)

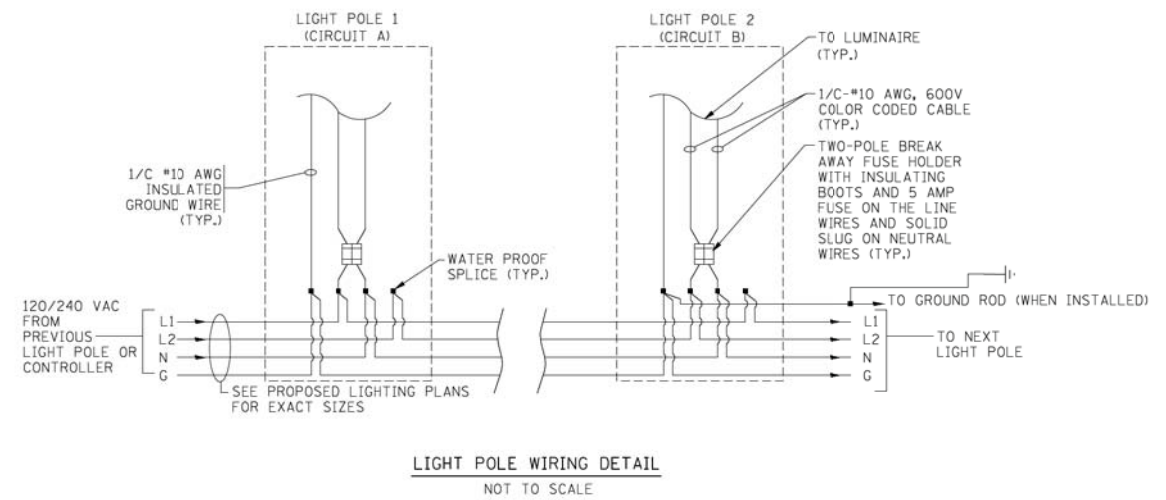
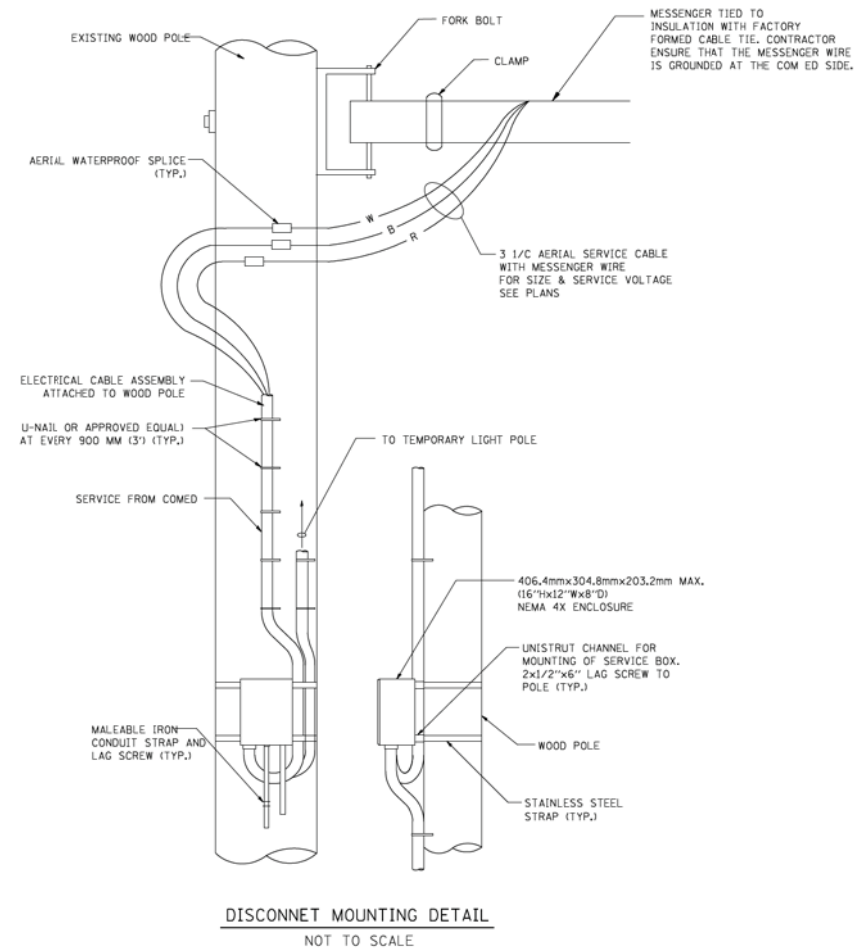
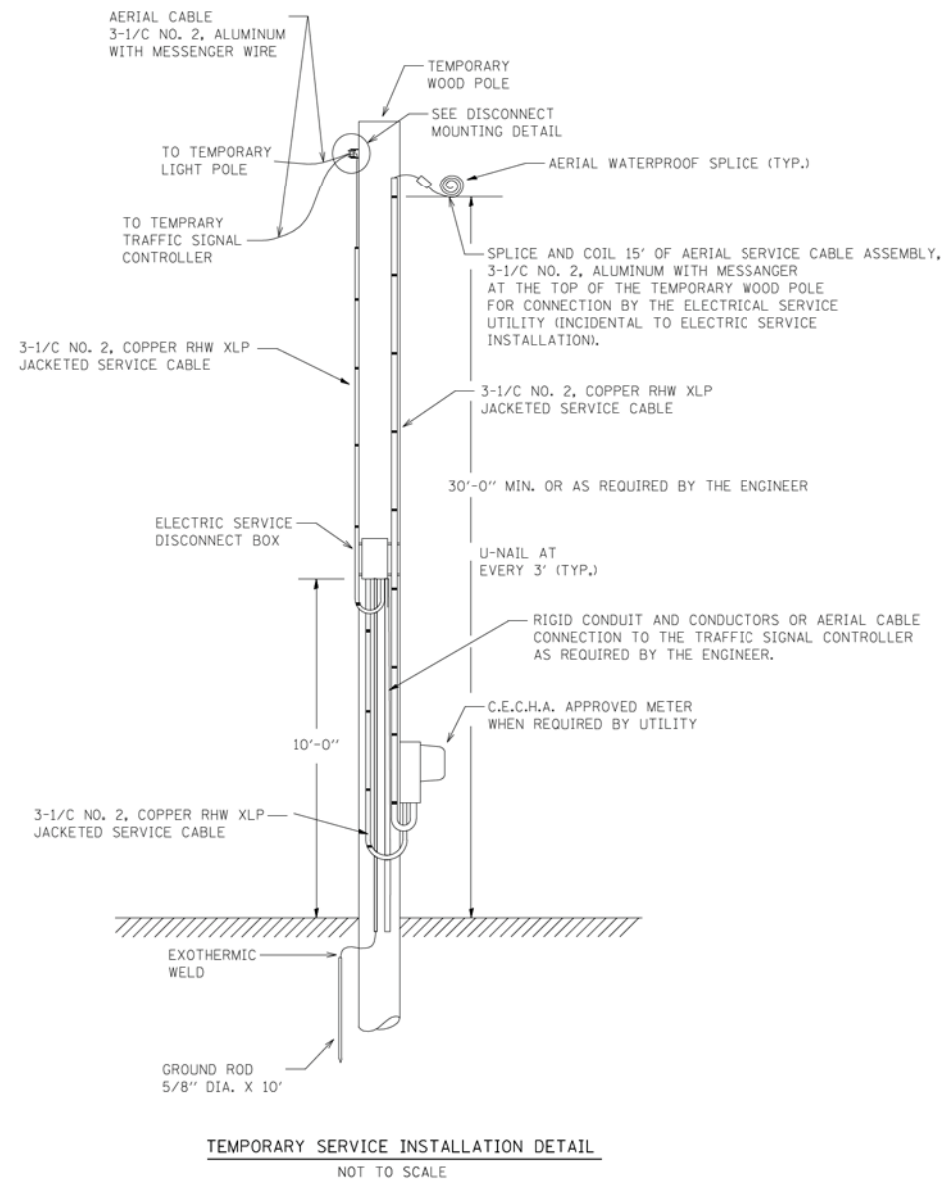
TEMPORARY PHASE DESIGNATION DIAGRAM LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE



TEMPORARY PHASE DESIGNATION DIAGRAM (TYPICAL)
NOT TO SCALE

FILE NAME =	USER NAME = bauerdl	DESIGNED - MP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw_work\PW1001\BAUERDL\dl0108315\be805.dgn		DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 3 SHEETS	STA.	TO STA.	297	33B (B-R) & 33X-RS-2	WILL	275	237
		PLOT SCALE = 50.000' / IN.	CHECKED -		REVISED -				BE-805		CONTRACT NO.	60R52	
		PLOT DATE = 1/14/2010	DATE = 01/14/10		REVISED -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



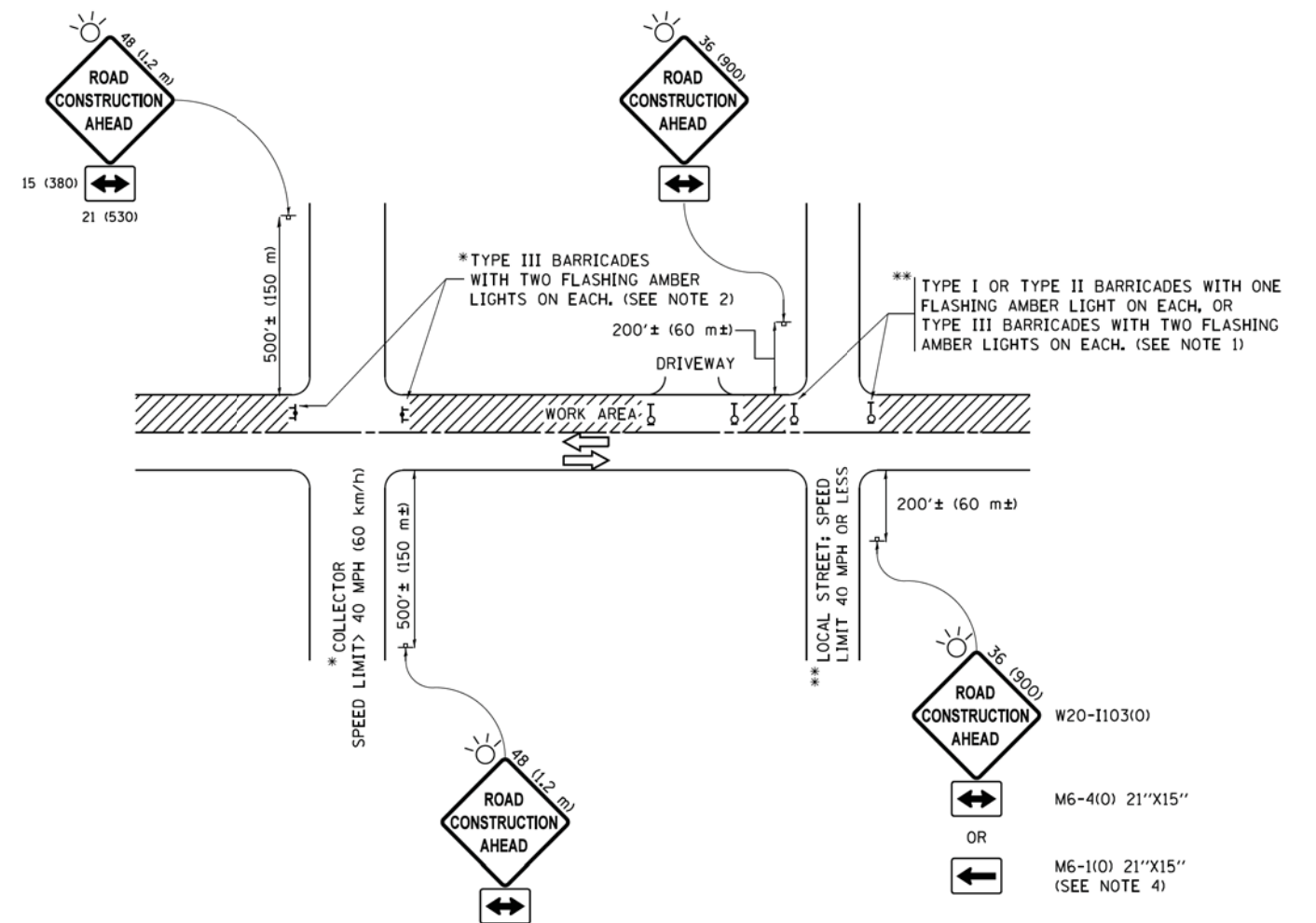
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et:\pw\work\PWIDOT\BAUERDL\d0108315\be805.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE - 01/14/10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND TRAFFIC SIGNALS
FOR SINGLE LANE STAGING**

SCALE: NONE SHEET NO. 2 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	238
BE-805		CONTRACT NO. 60R52		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S), THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

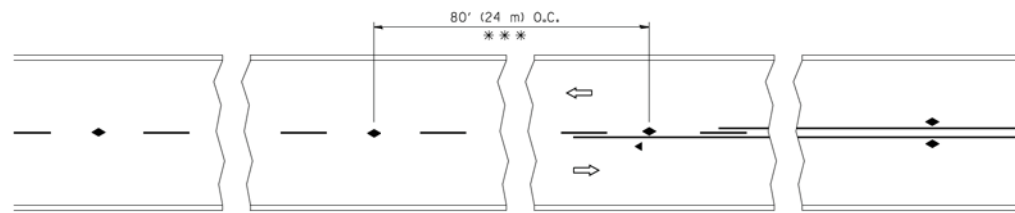
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pw\l\084EBID\INTEG\illinois.gov\FWIDOT\Documents\IDOT Offices\District 1\Projects\Dist 5\DRAWN\CADDeta\CADsheets\tc10.dgn		CHECKED -	REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 50,000' / 1"v	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016		REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

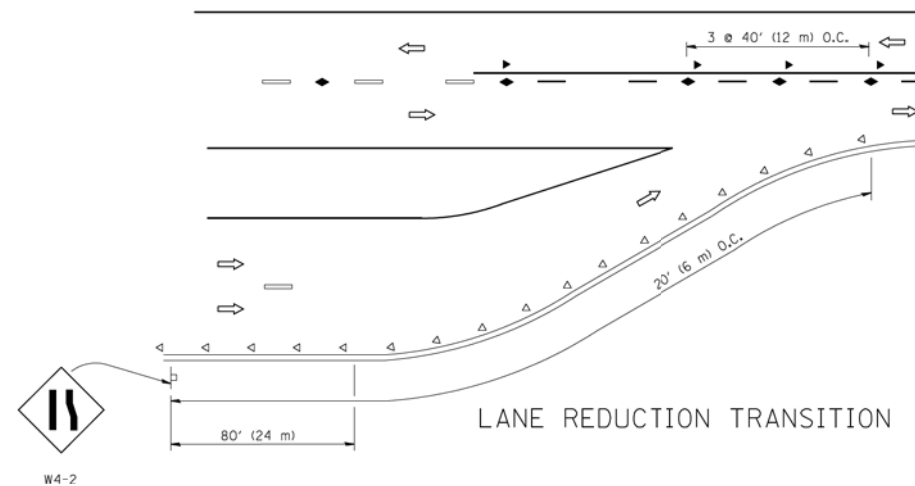
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

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TC-10			CONTRACT NO. 60R52	
ILLINOIS FED. AID PROJECT				

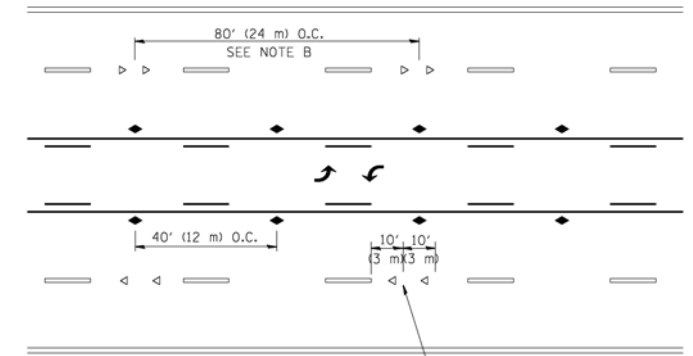


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

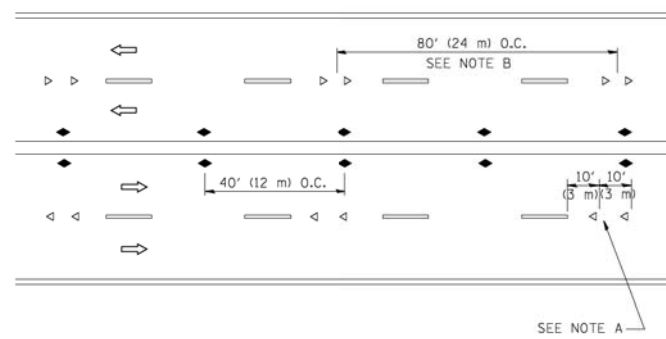
TWO-LANE/TWO-WAY



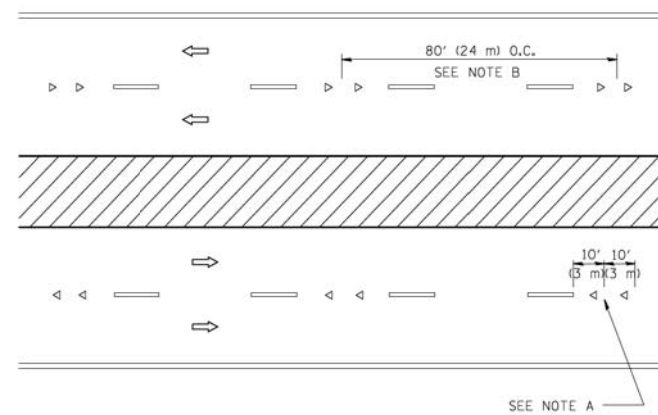
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

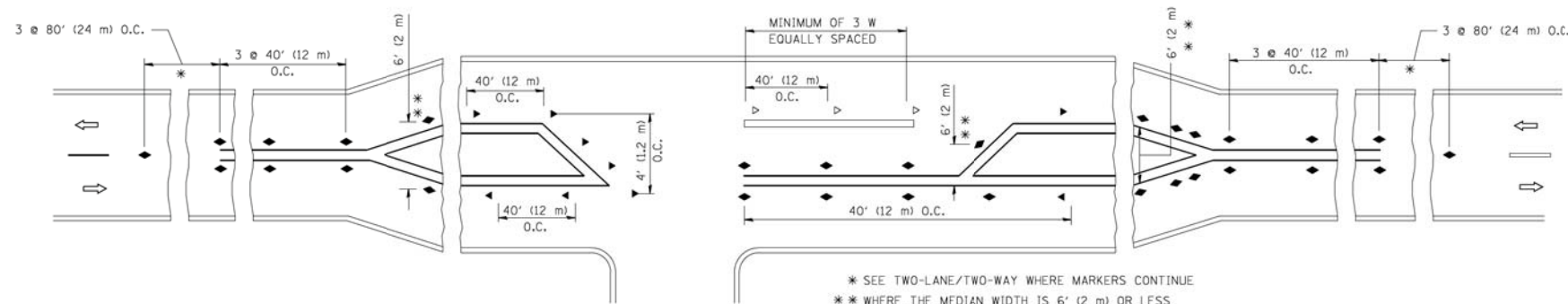
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

All dimensions are in inches (millimeters) unless otherwise shown.

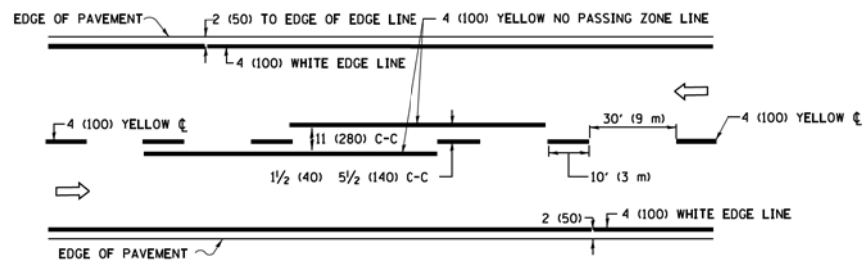
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	PLOT DATE = 9/9/2009	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

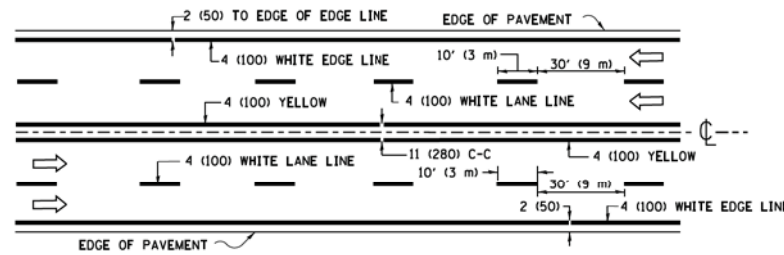
TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

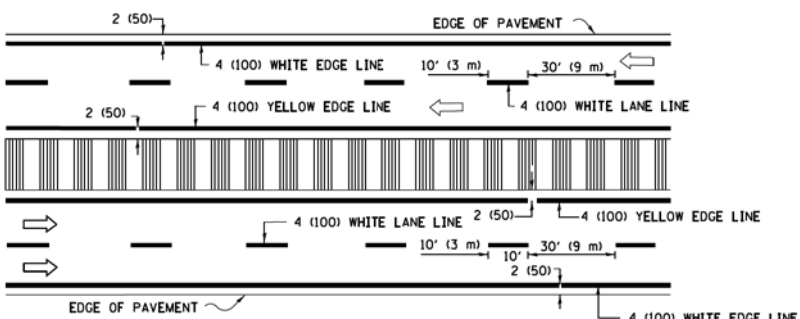
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	241
TC-11			CONTRACT NO. 60R52	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

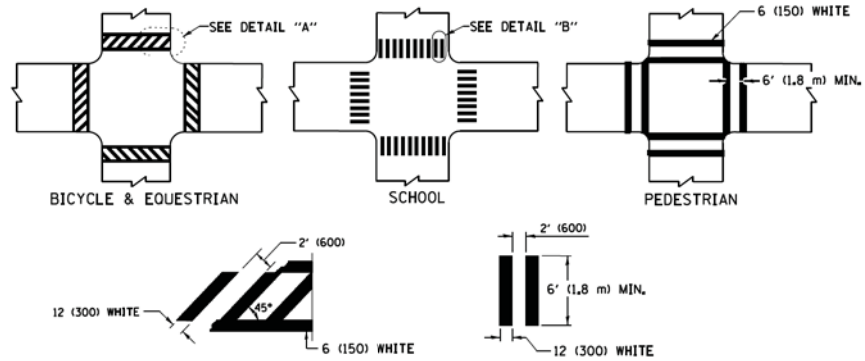


MULTI-LANE UNDIVIDED



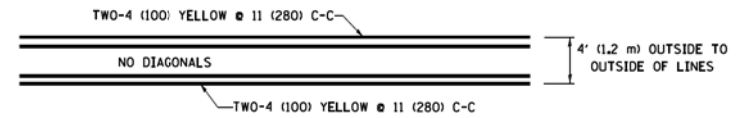
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

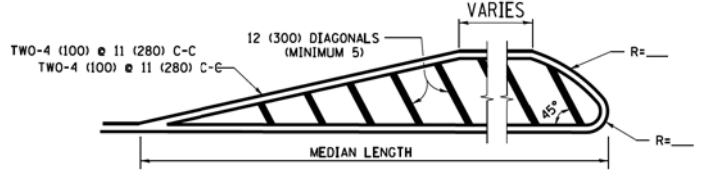


TYPICAL CROSSWALK MARKING

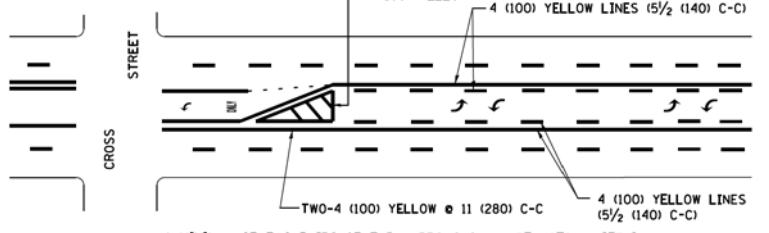
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



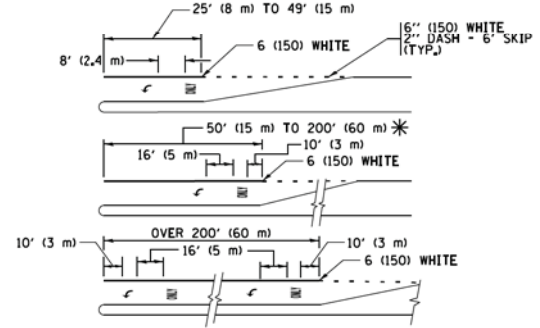
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE

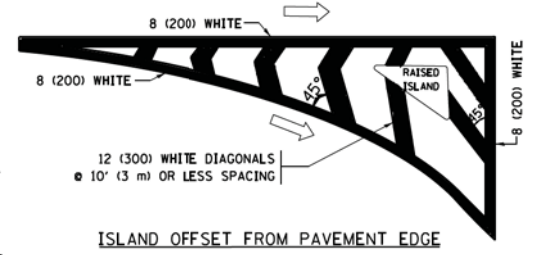


MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING

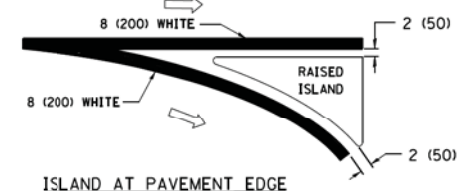


TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING

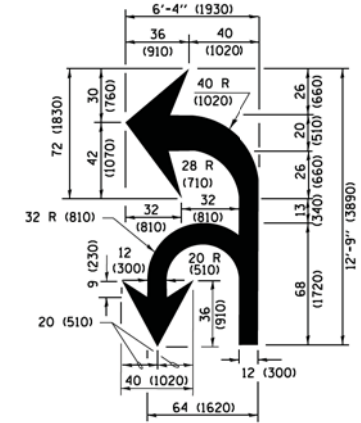
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".



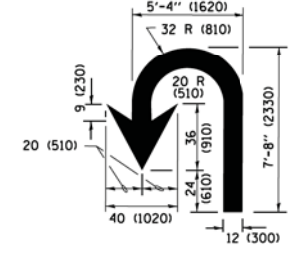
ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "X" = 3.6 SQ. FT. (0.33 m ²) EACH "X" = 54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

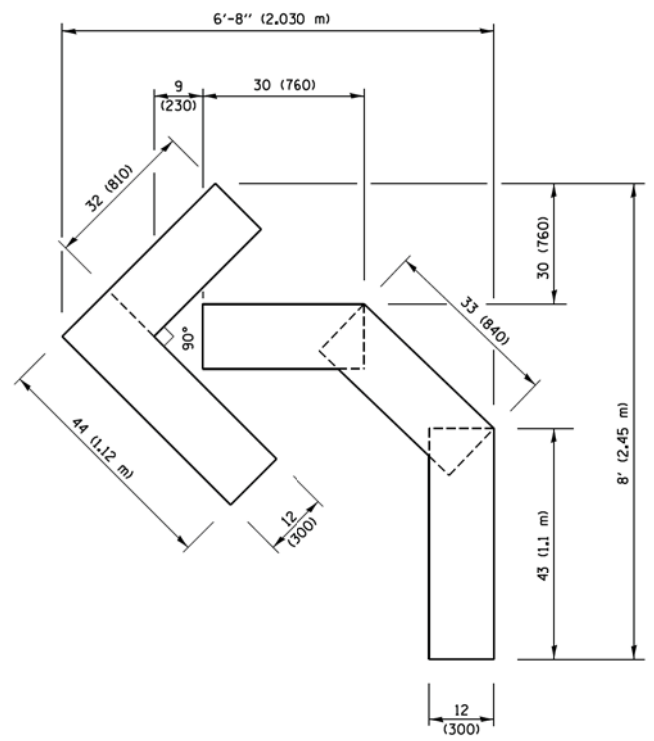
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
pw\11084EBID\INTEG\111084EBID\Documents\DOT Offices\District 1\Projects\Dist 1\DRAWN\CADData\CADsheets\tol3.dgn		CHECKED -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 50,000' / in	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 4/13/2016		REVISED - C. JUCIUS 04-12-16

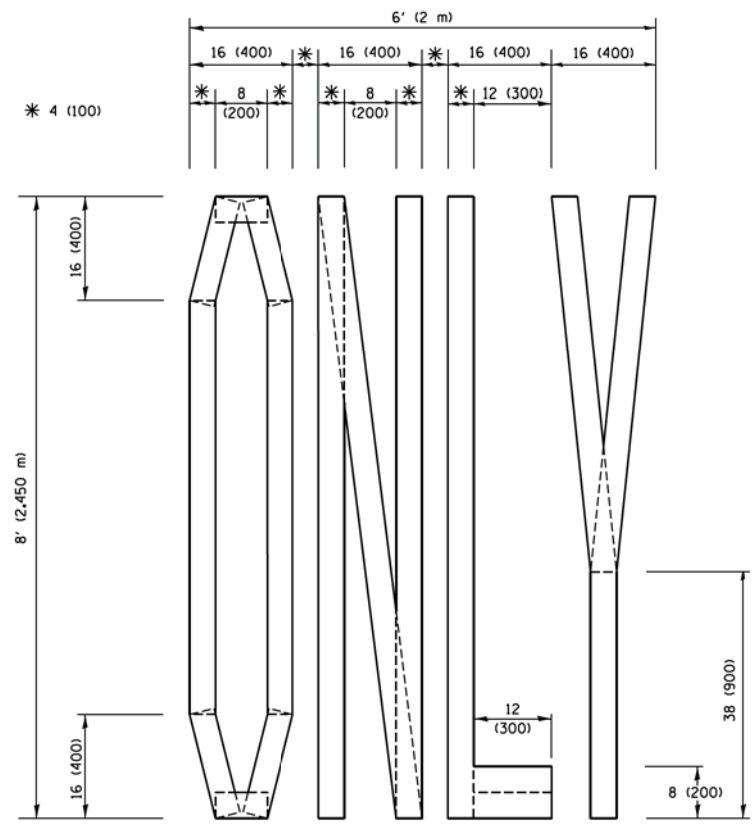
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. TO STA.	

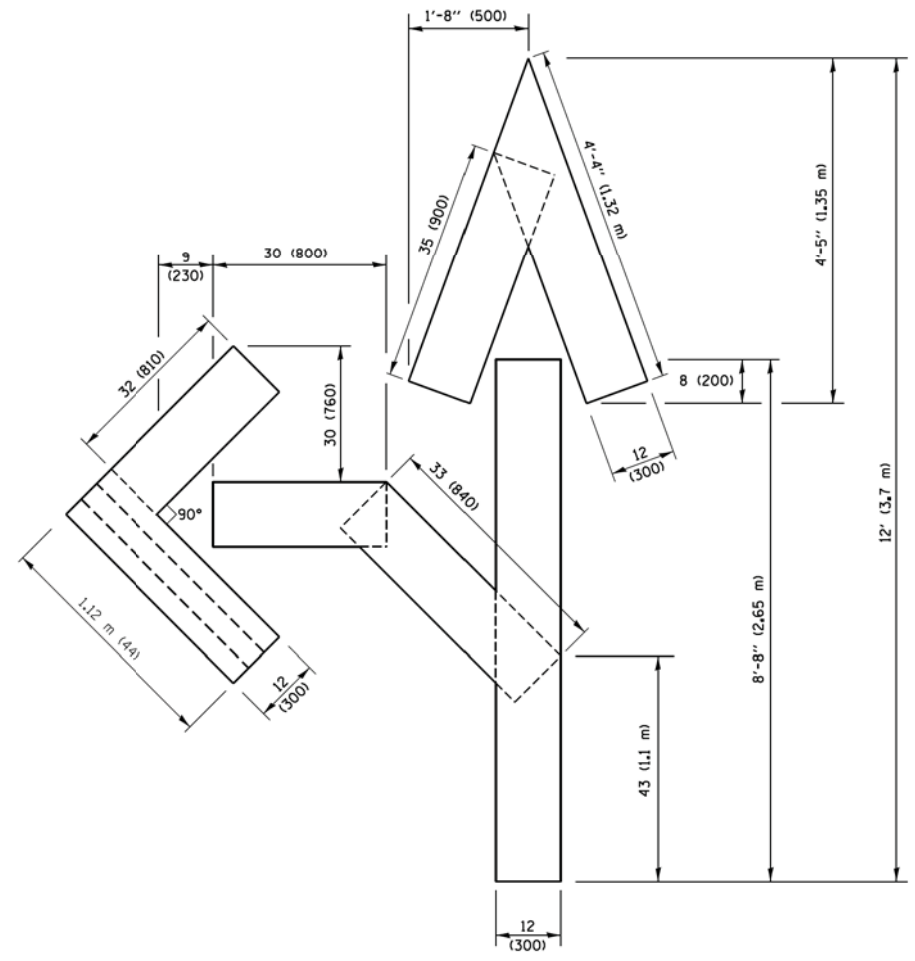
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	242
TC-13		CONTRACT NO. 60R52	ILLINOIS FED. AID PROJECT	



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.41 sq. m)

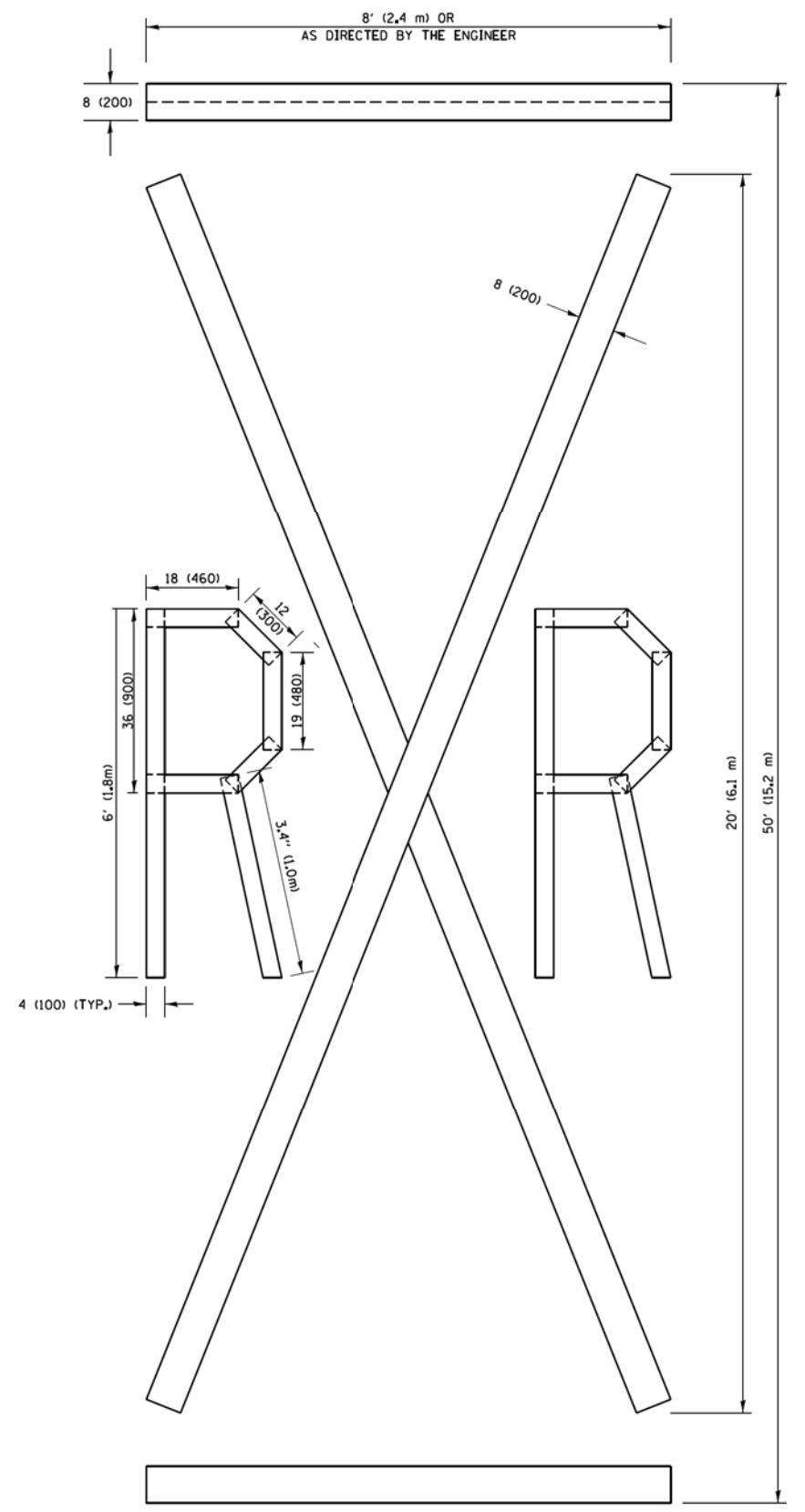


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.1 m)
 27.5 sq. ft. (2.53 sq. m)

NOTE:
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY
 4 (100) LINE = 225.9 ft. (68.9 m)
 75.3 sq. ft. (6.99 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footerj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
pw\l\084EBID\INTEG\11\10884EBID\Documents\DOT Offices\District 1\Projects\Dist 1\084EBID\CAD\Drawings\16.dgn		DRAWN -	REVISED - E. GOMEZ 08-28-00
		CHECKED -	REVISED - E. GOMEZ 08-28-00
		DATE -	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	243
TC-16		CONTRACT NO. 60R52		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

ROUTE MARKERS

FOR U.S. ROUTES
MI-40-2424

FOR ILLINOIS ROUTES
MI-50-2424

R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-1-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

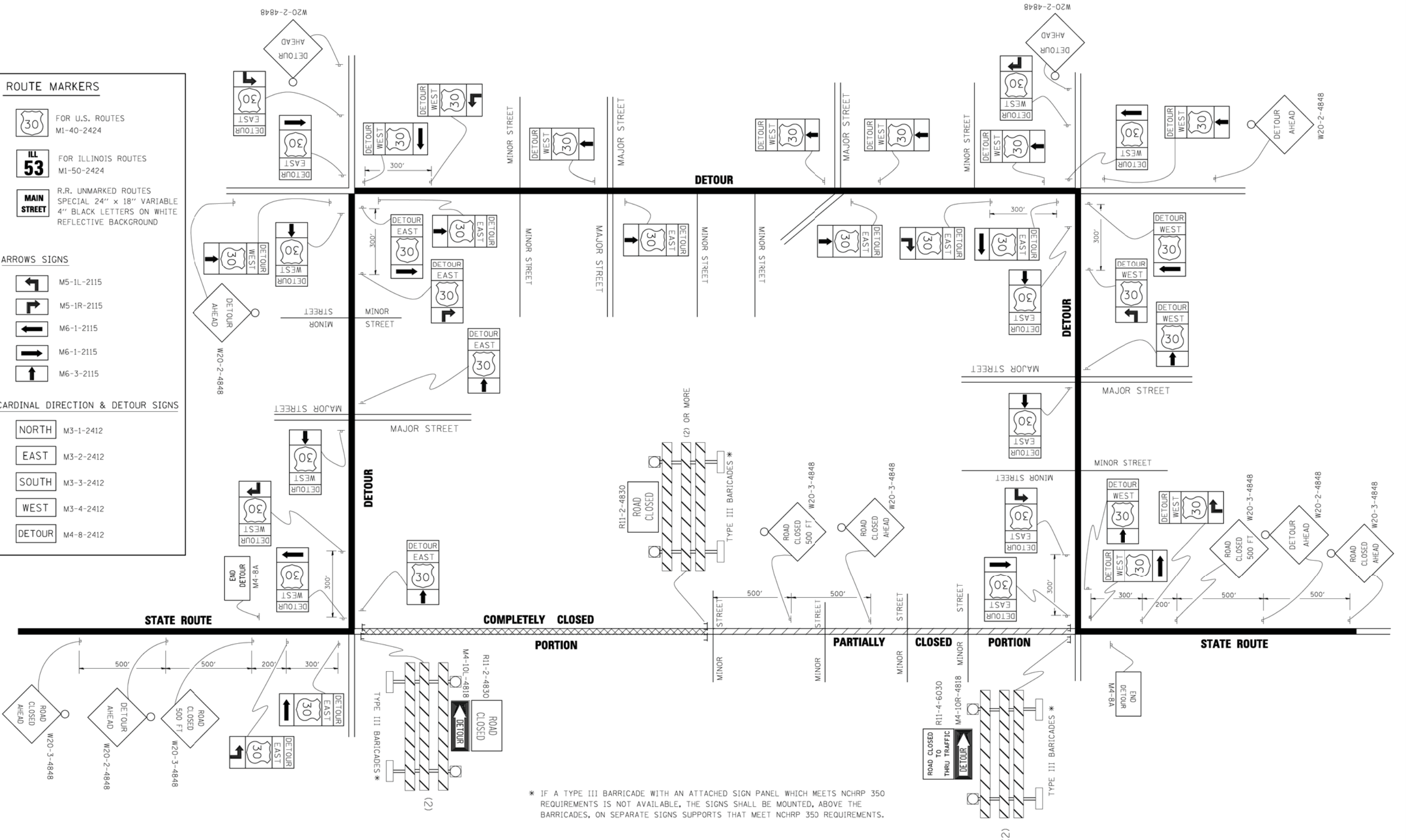
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



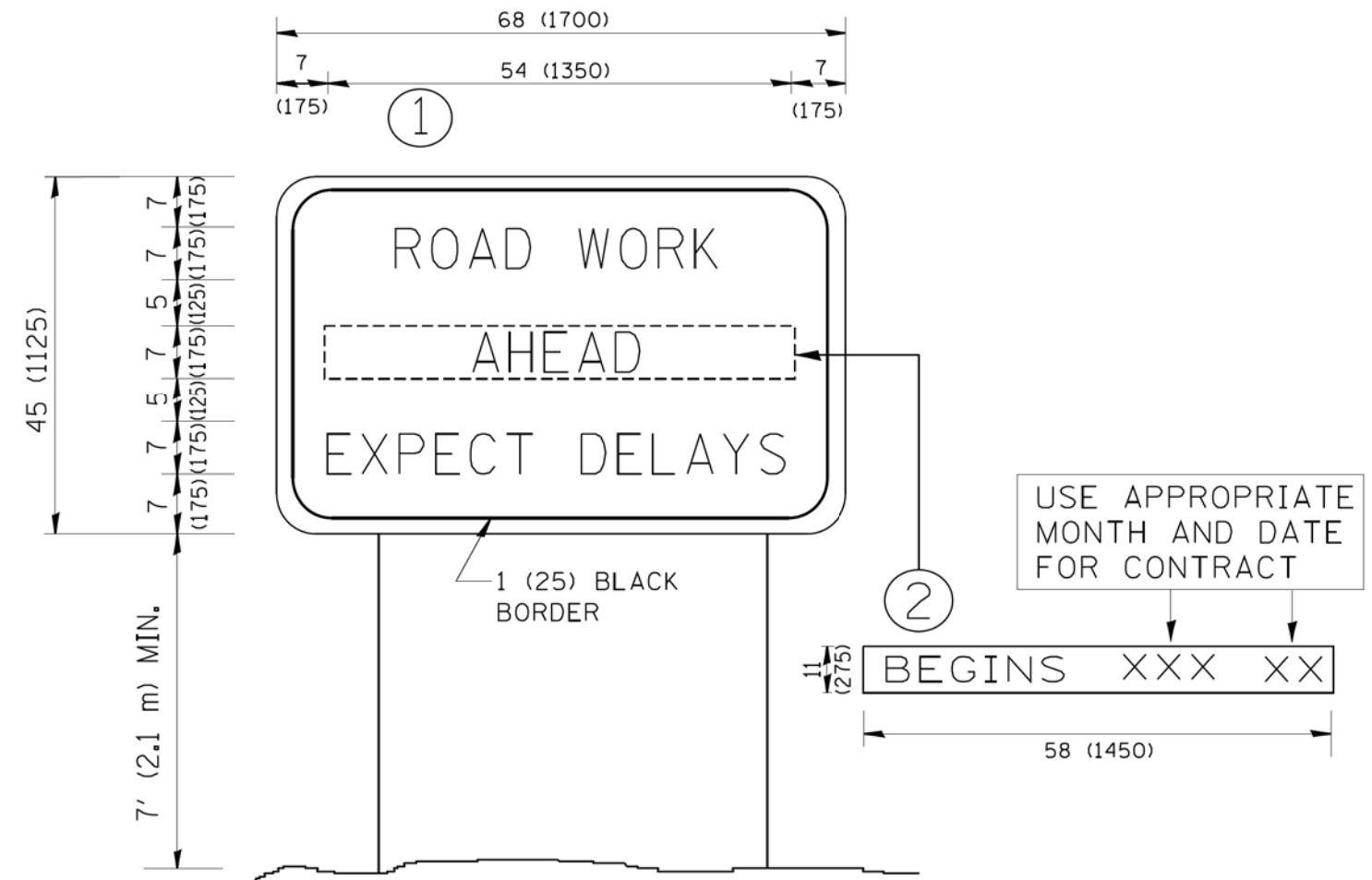
* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - 10-18-02
et:\pw_wor\k\PWIDDT\DRIVAKOSGN\d0108315\1421.dgn		DRAWN -	REVISED - R. BORO 09-14-09
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETOUR SIGNING FOR CLOSING STATE HIGHWAYS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	244
TC-21			CONTRACT NO. 60R52	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

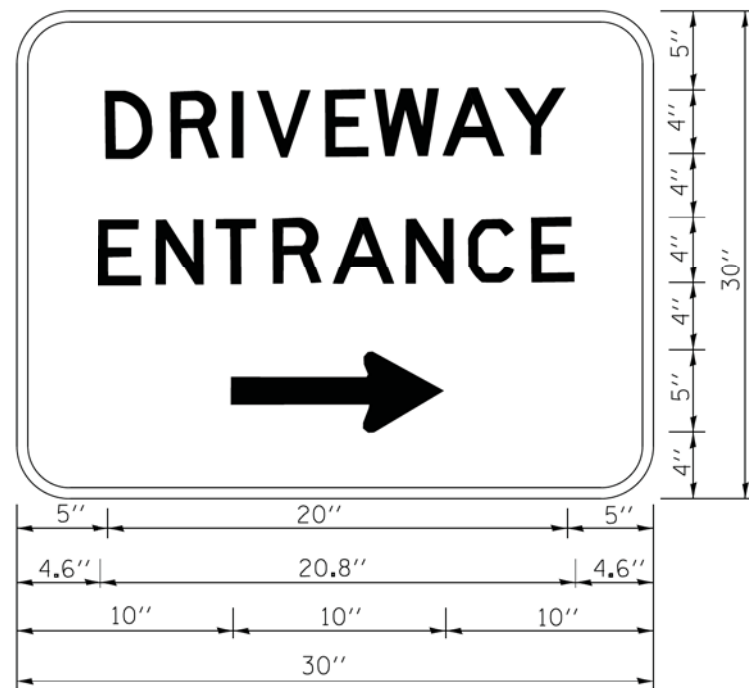
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		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	245
TC-22		CONTRACT NO. 60R52		
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = gaglianob	DESIGNED -	REVISED - C. JUCIUS 02-15-07
ct\pw\work\p\dot\gaglianob\d0108315\to	P6.dgn	DRAWN -	REVISED -
	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2012	DATE -	REVISED -

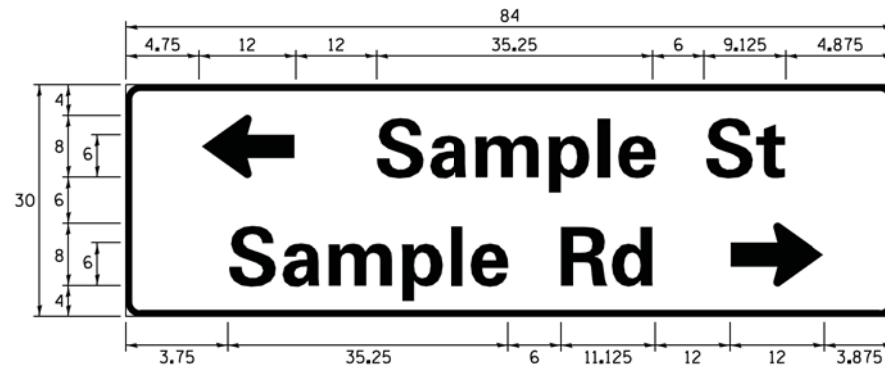
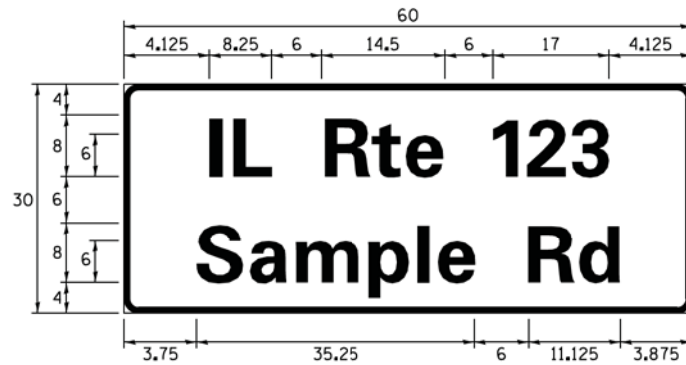
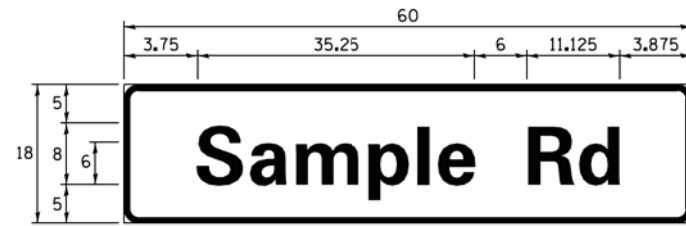
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	246
TC-26			CONTRACT NO. 60R52	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

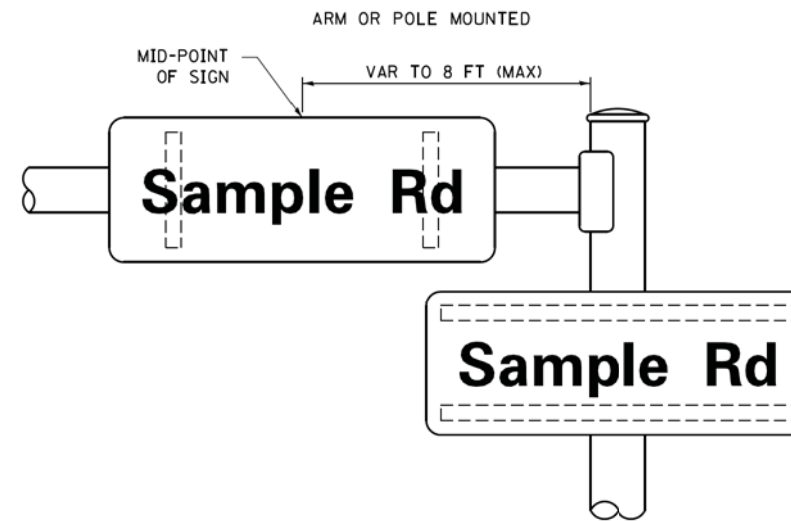
- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA
- WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

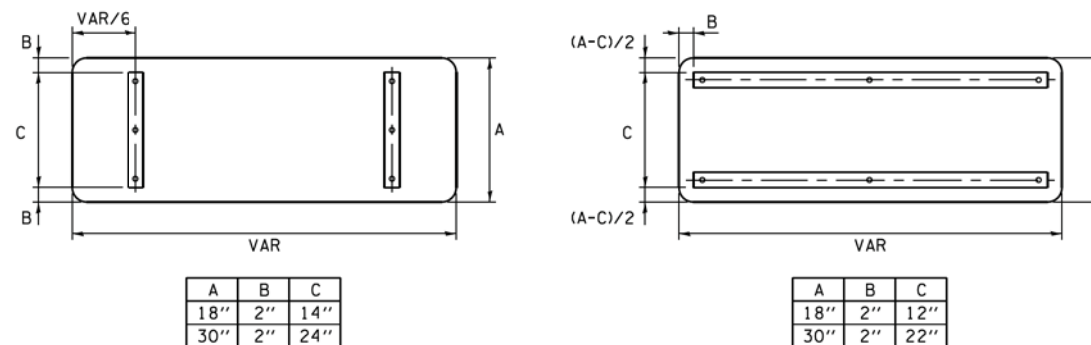
- SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
- SIGN SCREWS PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
- BRACKETS

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION



SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART

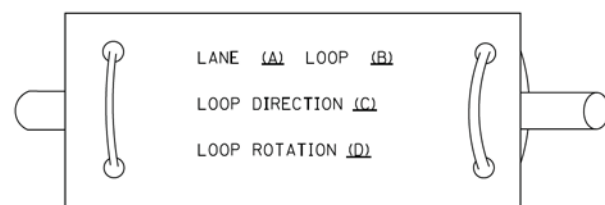
(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

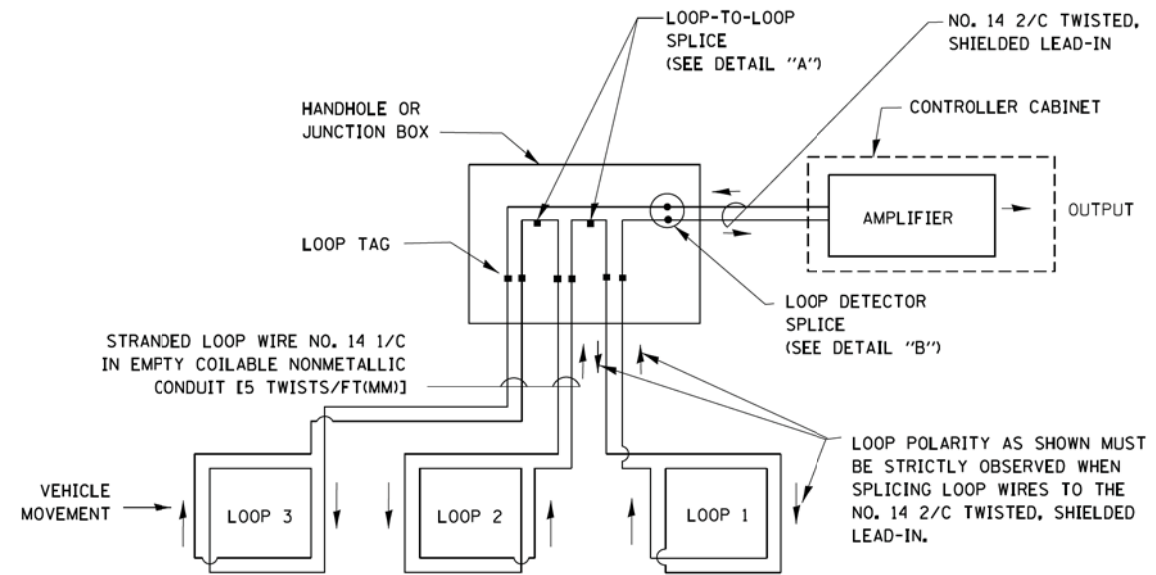
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

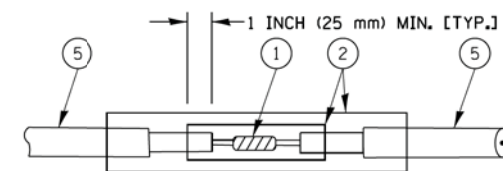


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

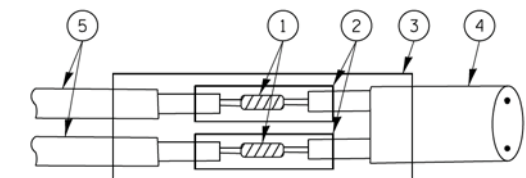


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

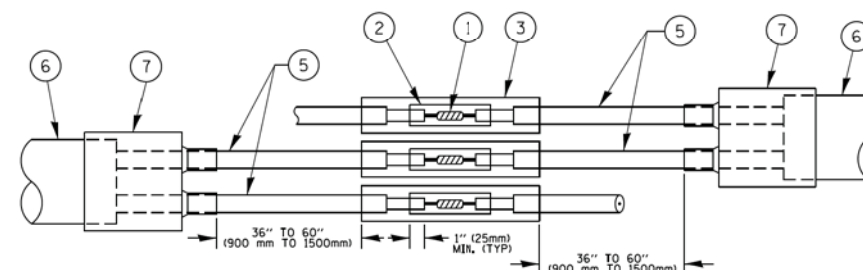


DETAIL "A"
LOOP-TO-LOOP SPLICE

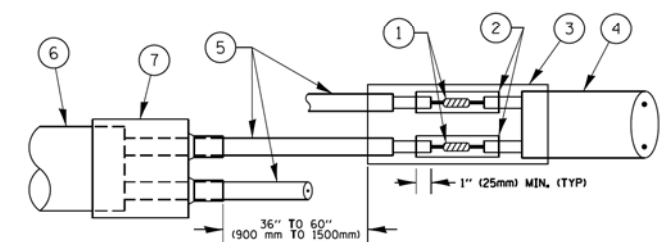


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

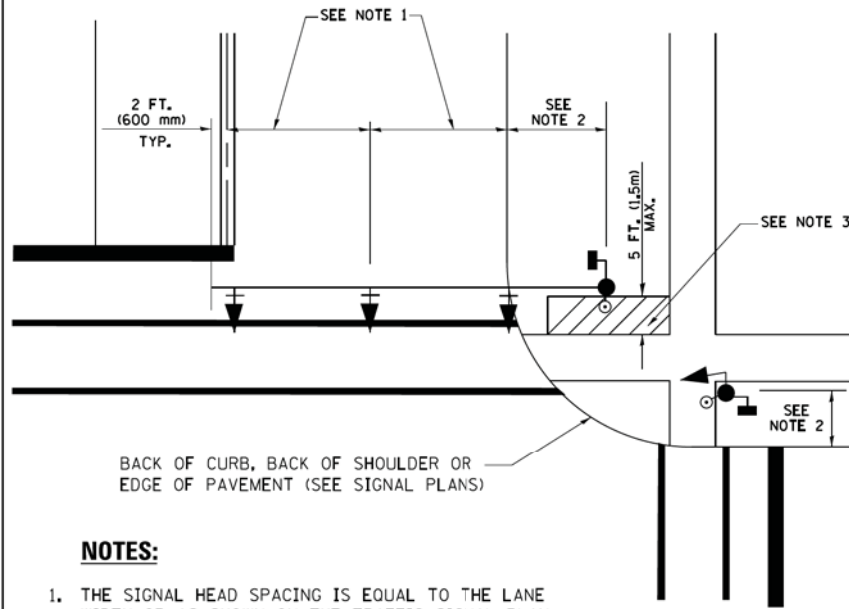
PREFORMED LOOP

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PREFORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\p\dot\footemj\d0108315\ts05.dgn		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA.	TO STA.	297	33B (B-R) & 33X-RS-2	WILL	275	249
		CHECKED - DAD	REVISED -					TS-05		CONTRACT NO. 60R52			
		DATE - 10-28-09	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

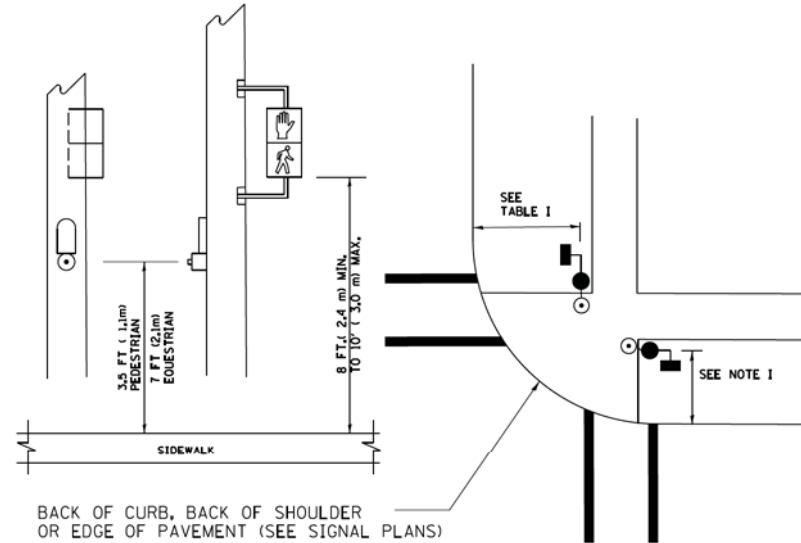
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

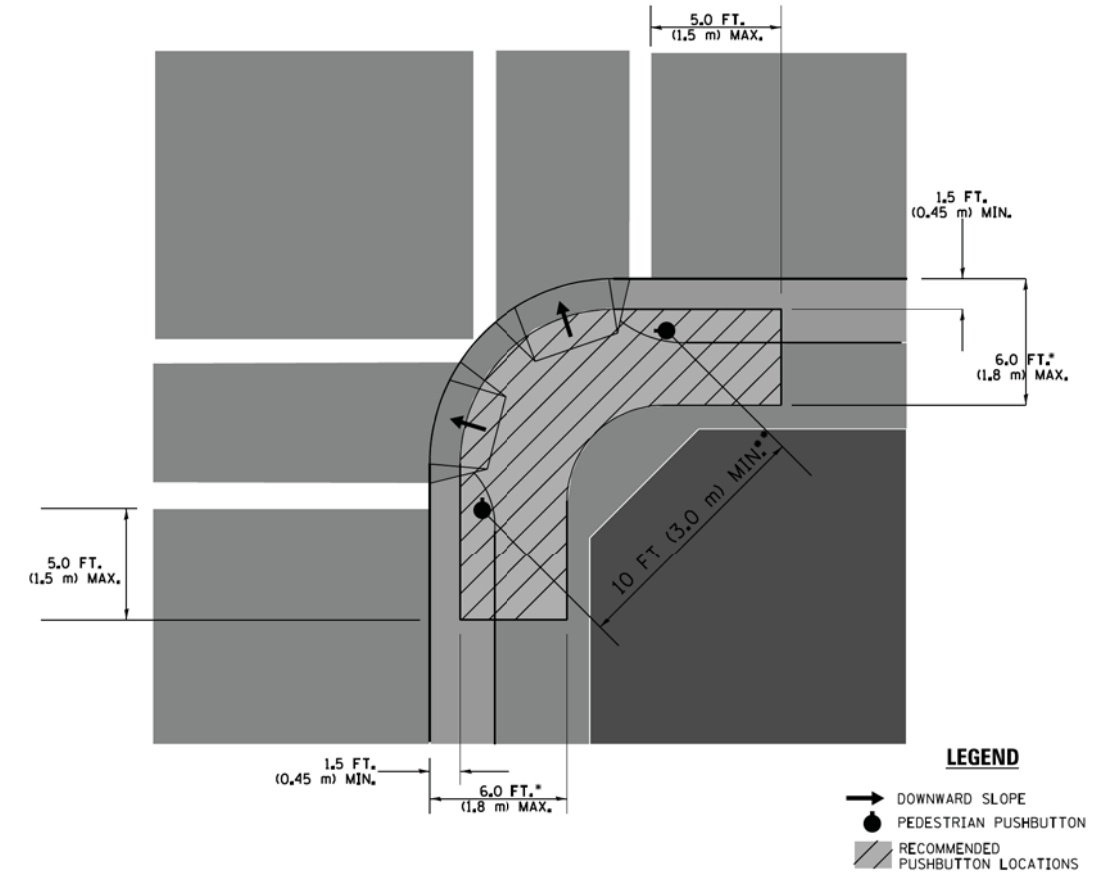
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

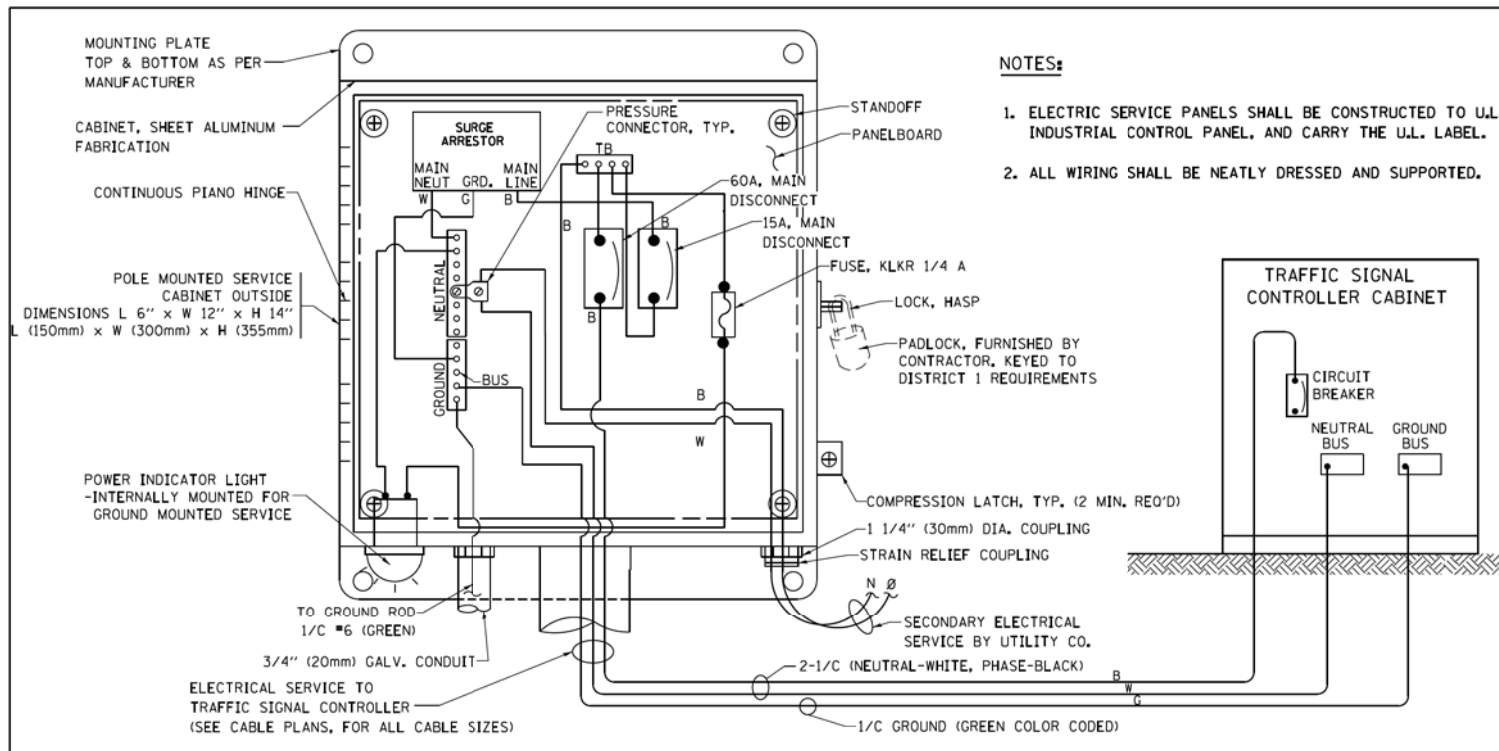
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

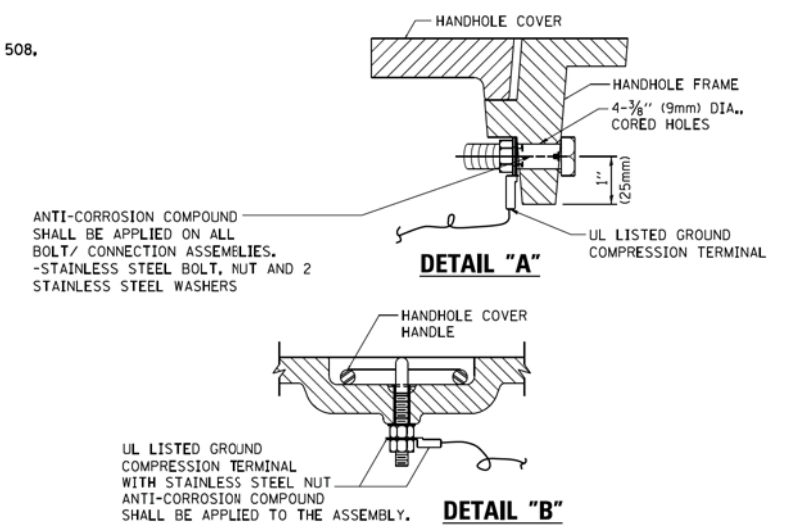
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

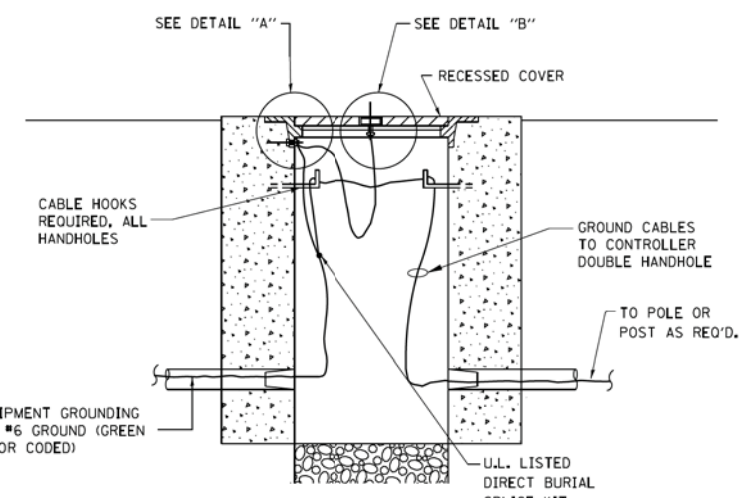


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)

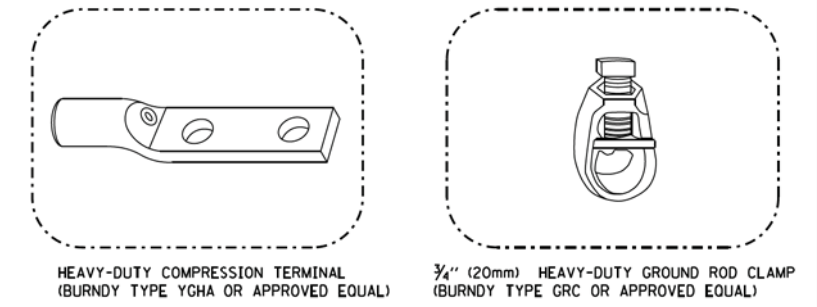


NOTES:
GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD, ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

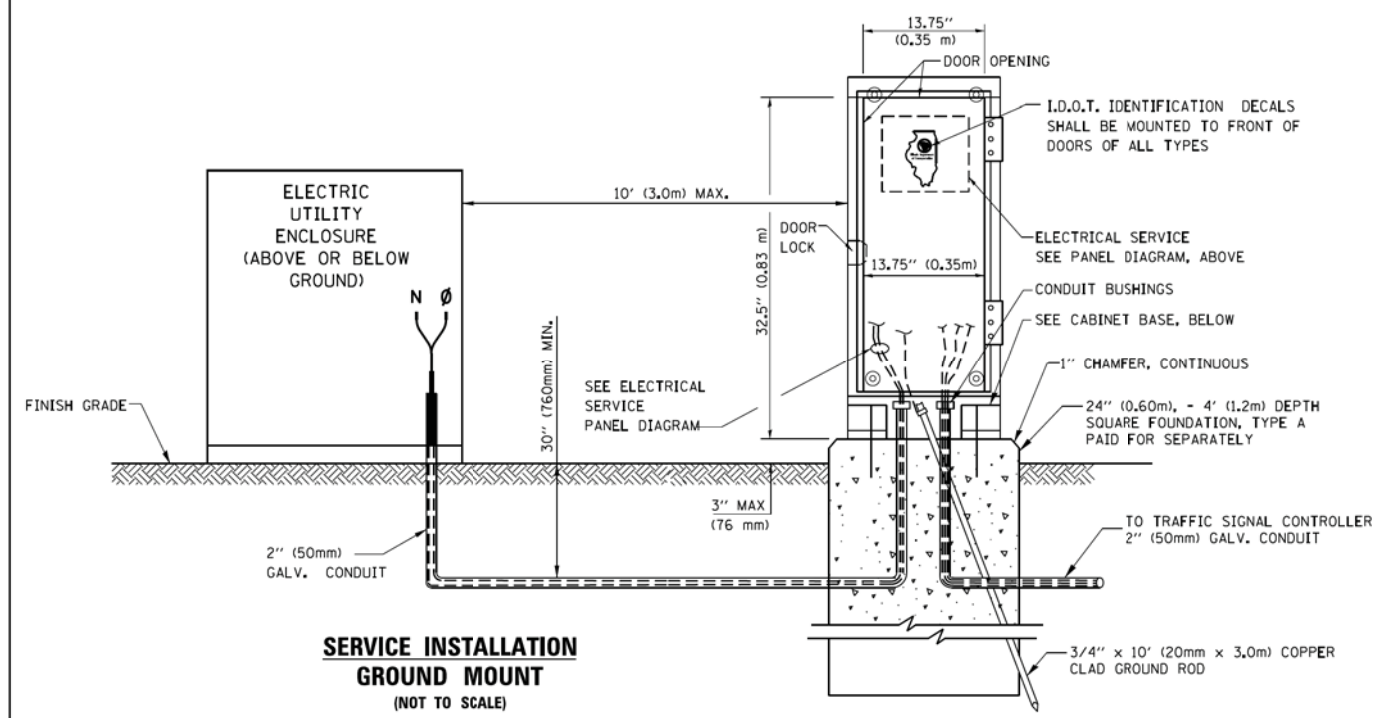


HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)

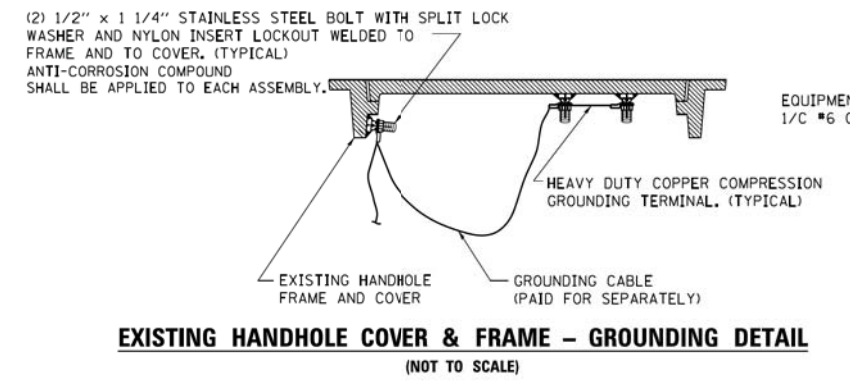


NOTES:

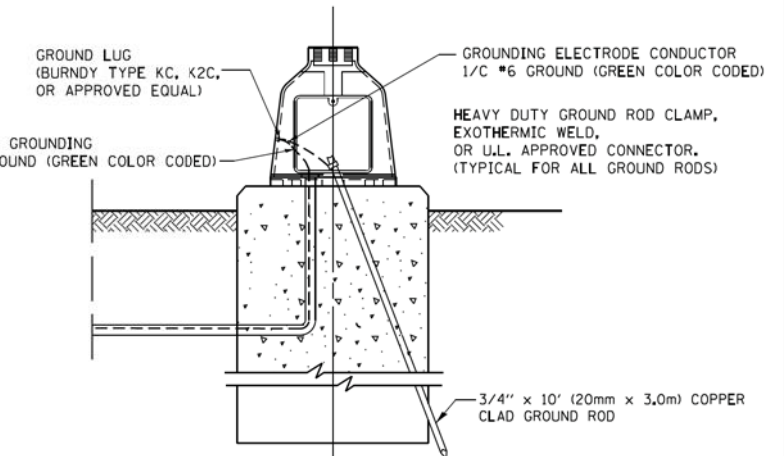
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

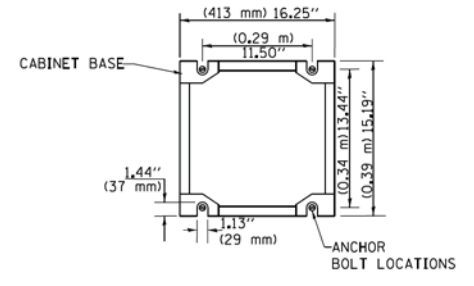


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)

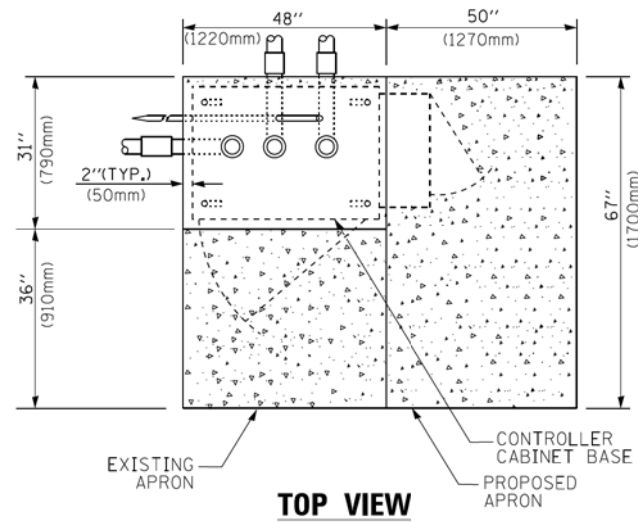


MAST ARM POLE / POST-GROUNDING DETAIL
 (NOT TO SCALE)

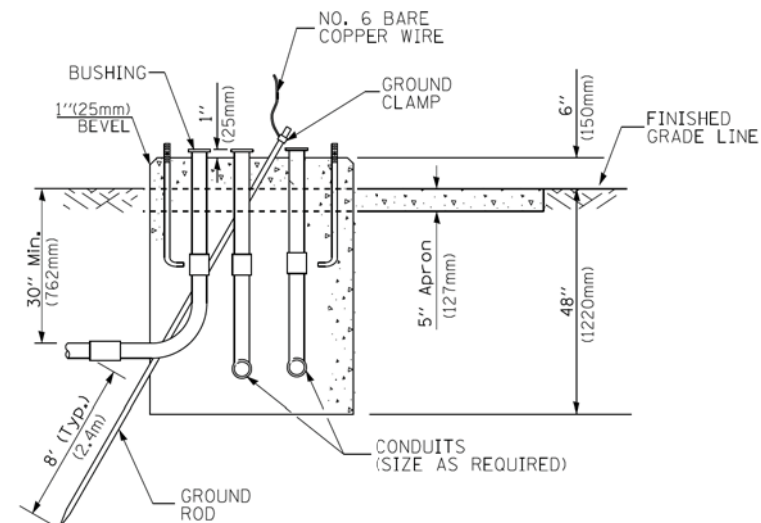
CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)



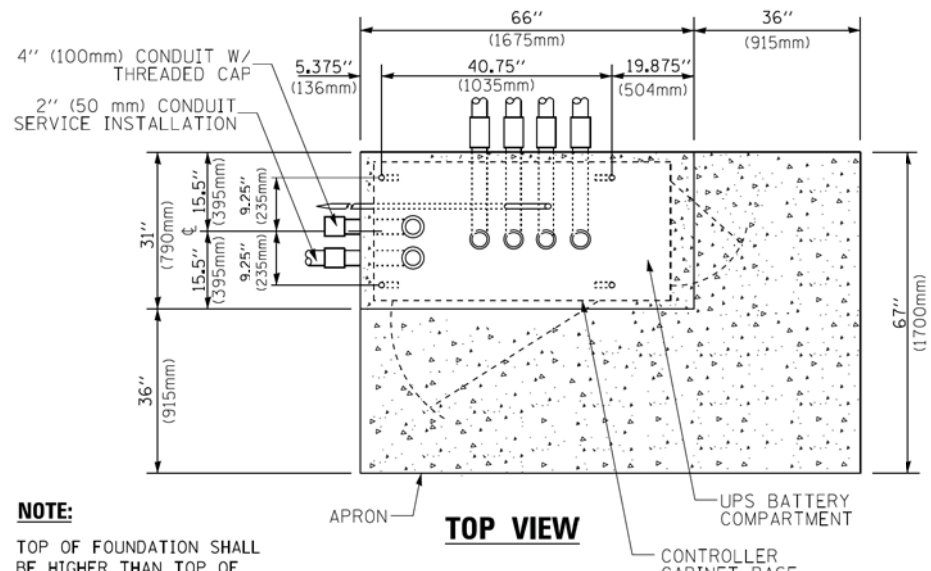
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ca:\pw\work\p\dot\footemj\d0108315\ts05.pgn		DRAWN - BCK	REVISED -		SCALE: NONE	SHEET NO. 4 OF 7 SHEETS	STA.	TO STA.	297	33B (B-R) & 33X-RS-2	WILL	275	251
		CHECKED - DAD	REVISED -						TS-05		CONTRACT NO. 60R52		
		DATE - 10-28-09	REVISED -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TOP VIEW

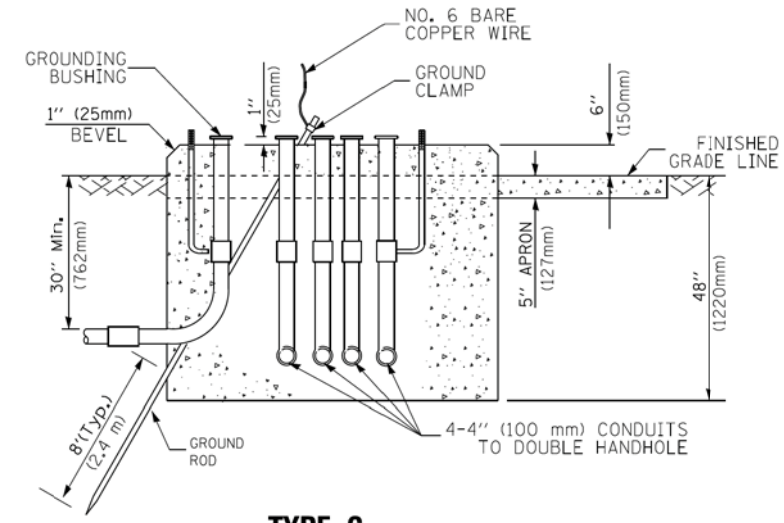


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

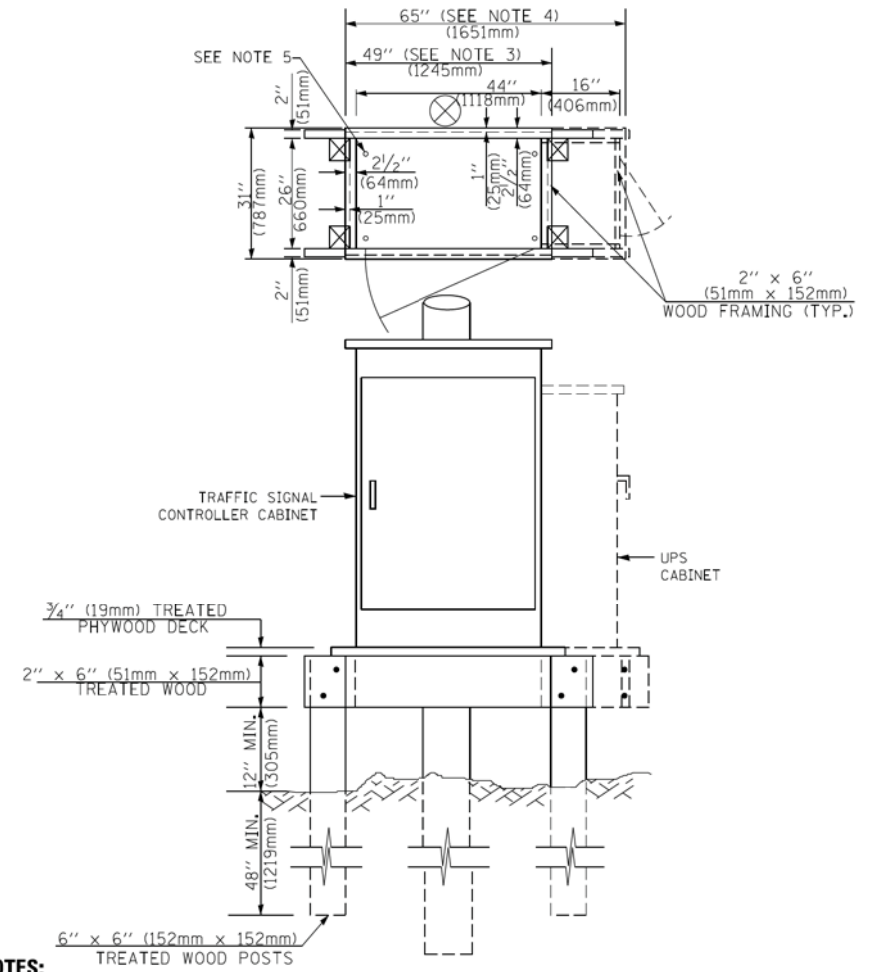


TOP VIEW

NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

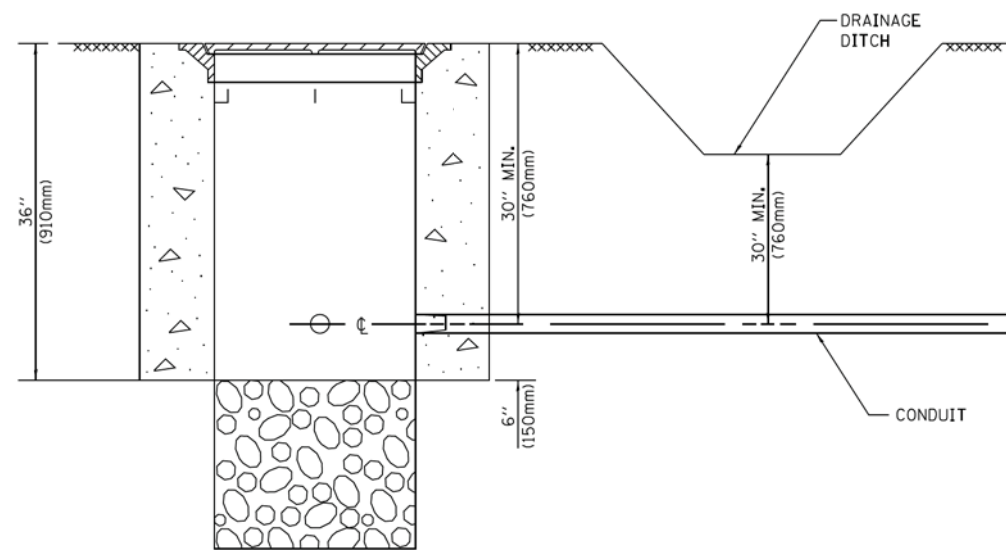
DEPTH OF FOUNDATION

MAST ARM LENGTH	① FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average unconfined compressive strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001..

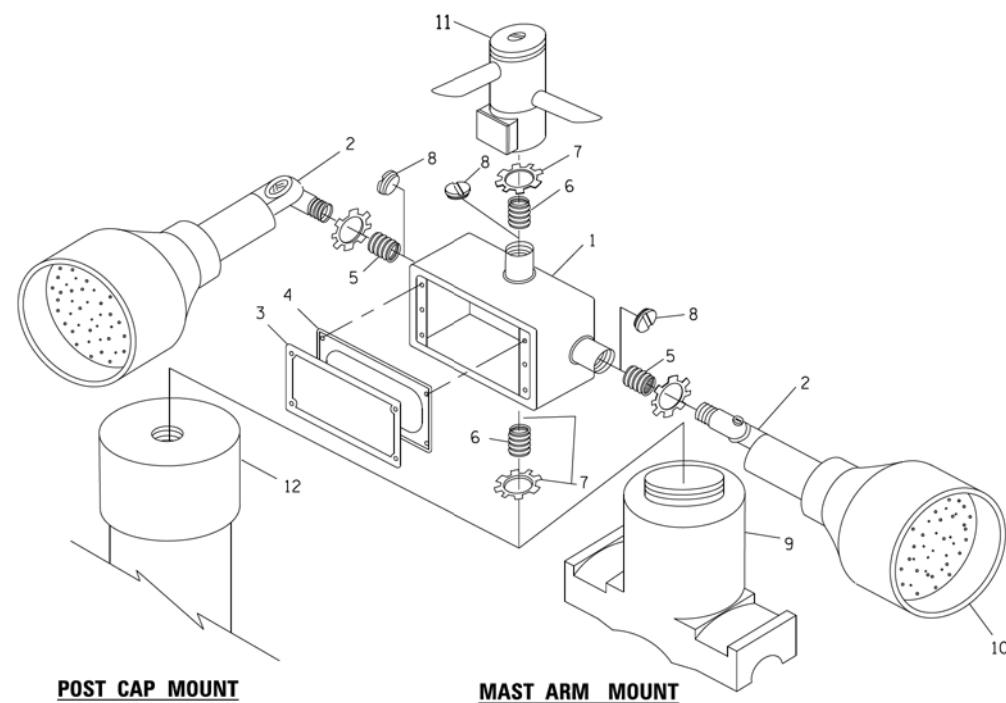
DEPTH OF MAST ARM FOUNDATIONS, TYPE E



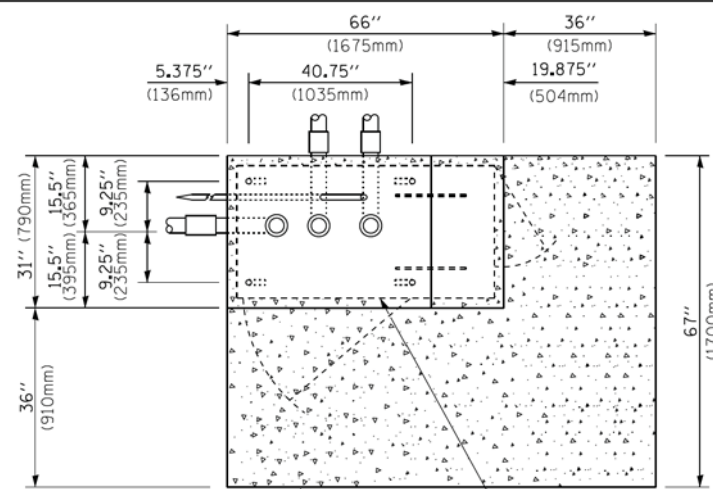
NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

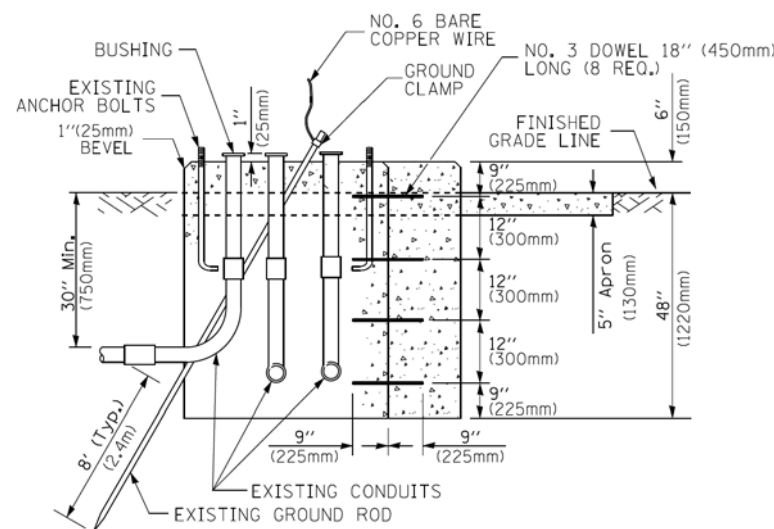
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

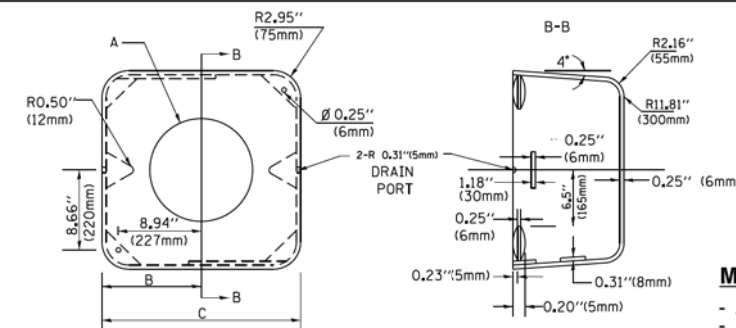


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

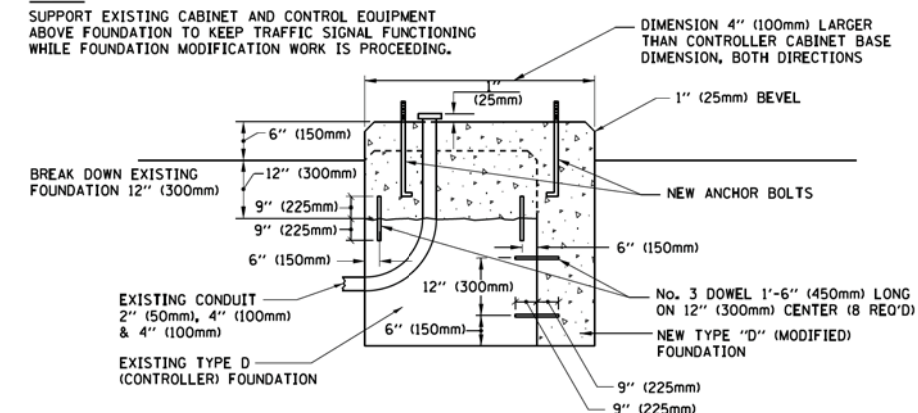
SHROUD

NOTES:

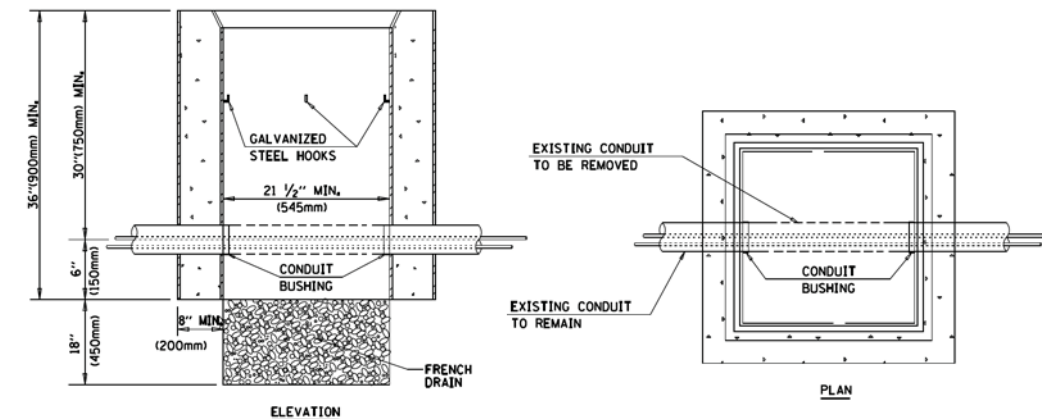
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

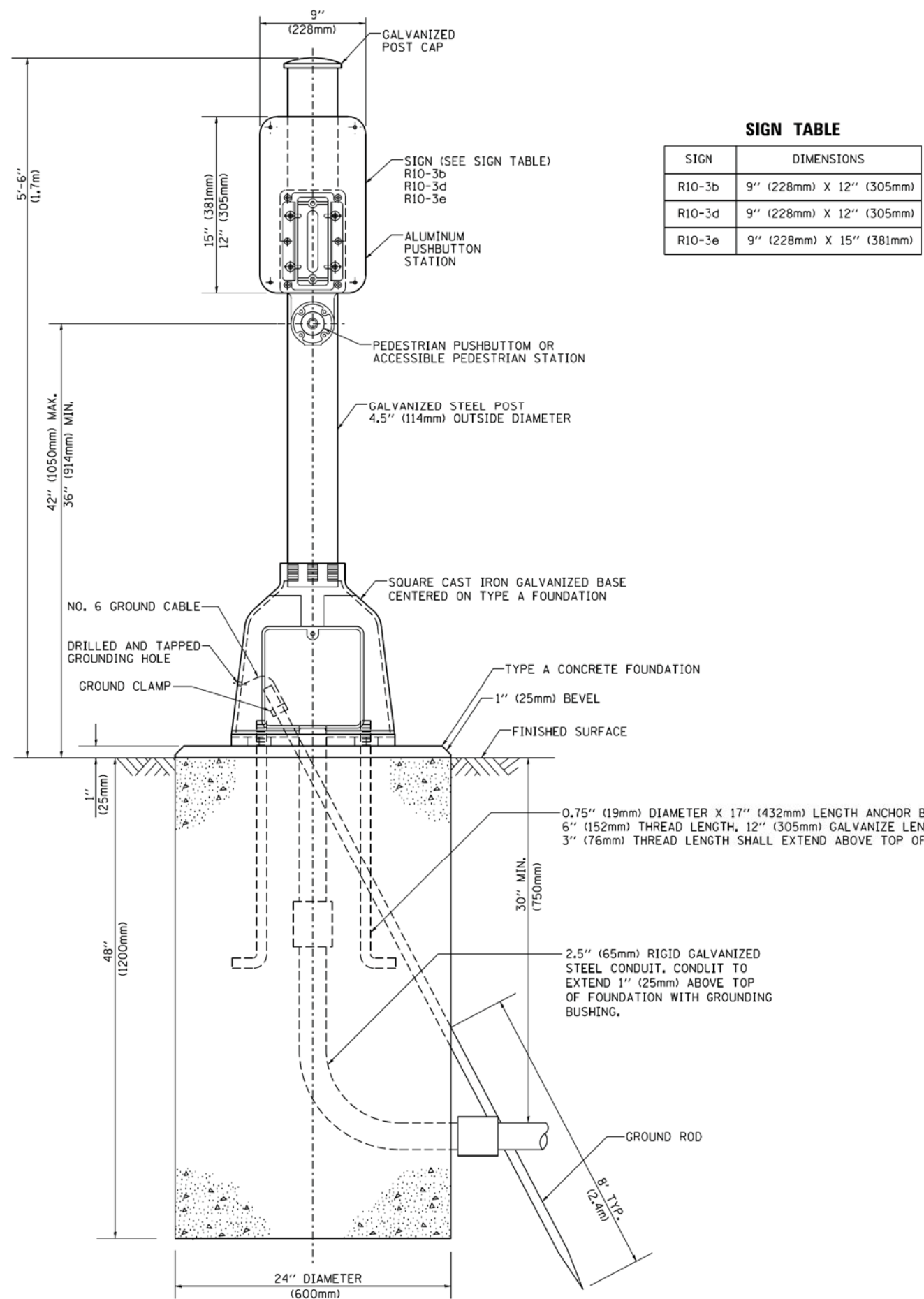
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

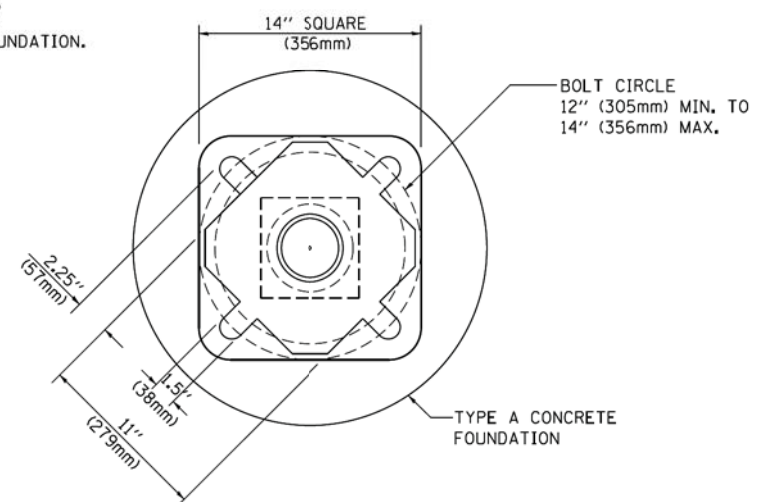
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	253
TS-05		CONTRACT NO.	60R52	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

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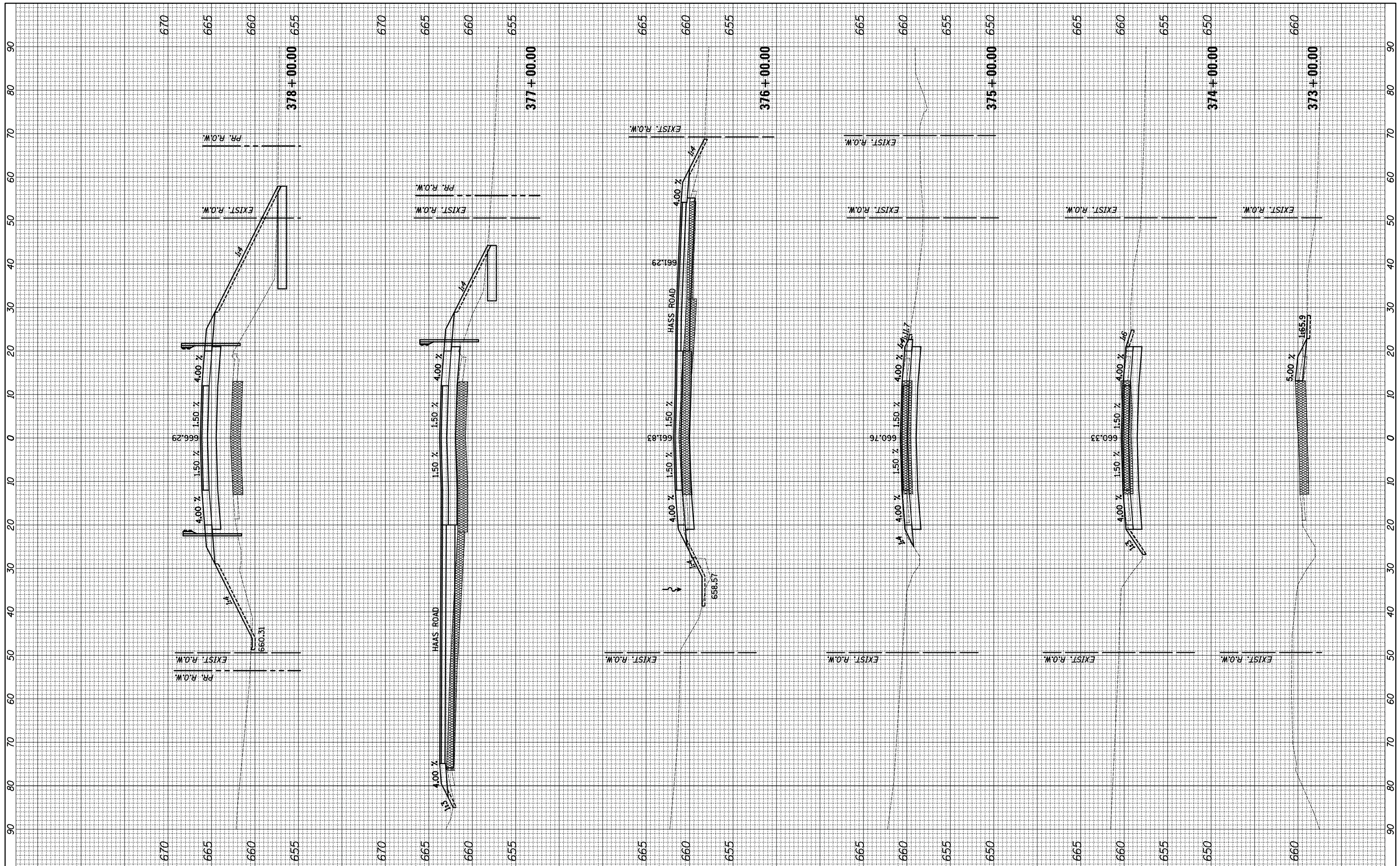
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	254
TS-05			CONTRACT NO. 60R52	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

BY	DATE

BY	DATE



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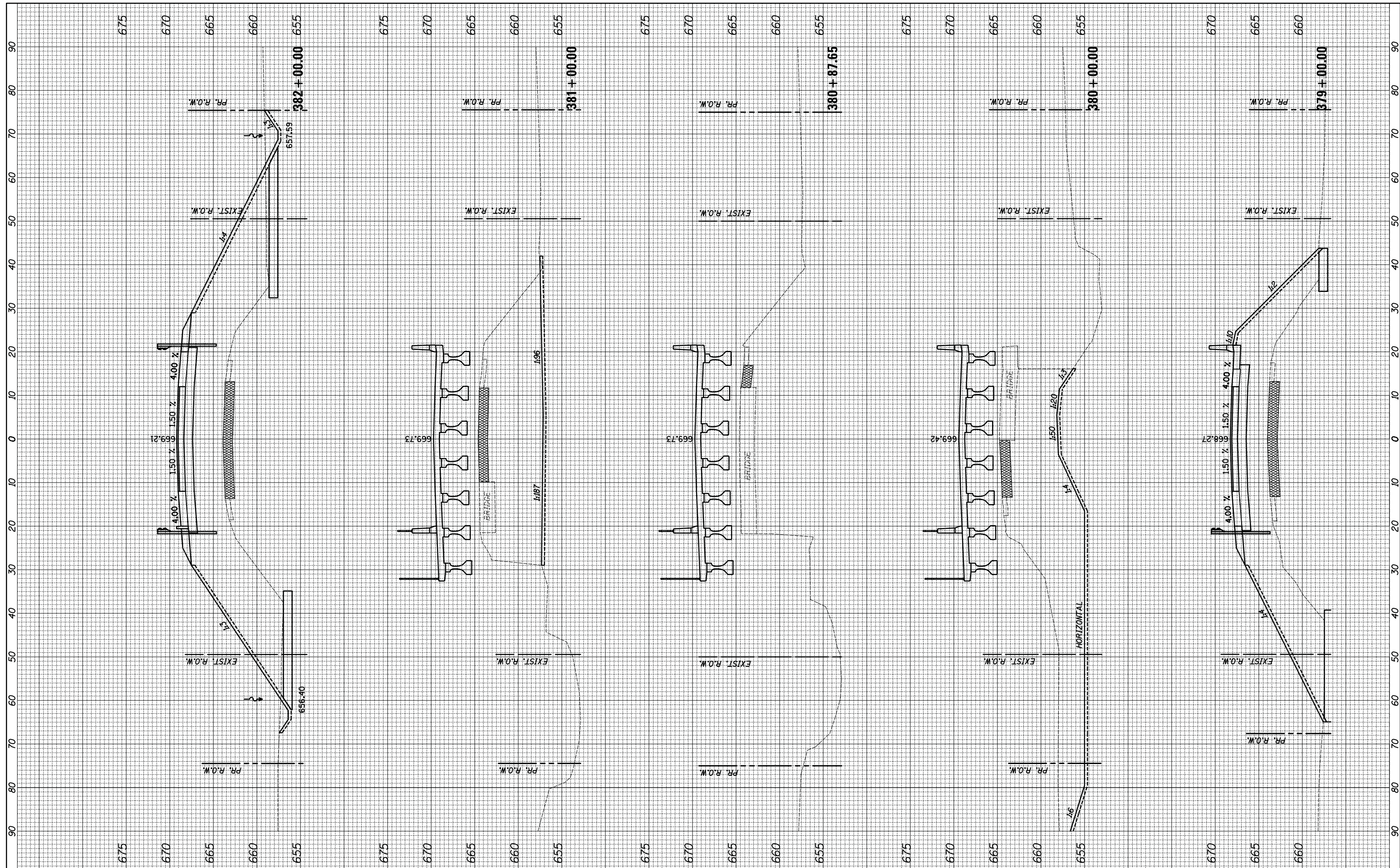
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS**
 SCALE: 10'H: 5'V SHEET 1 OF 17 SHEETS STA. 373+00.00 TO STA. 378+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	255
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

BY	DATE

BY	DATE



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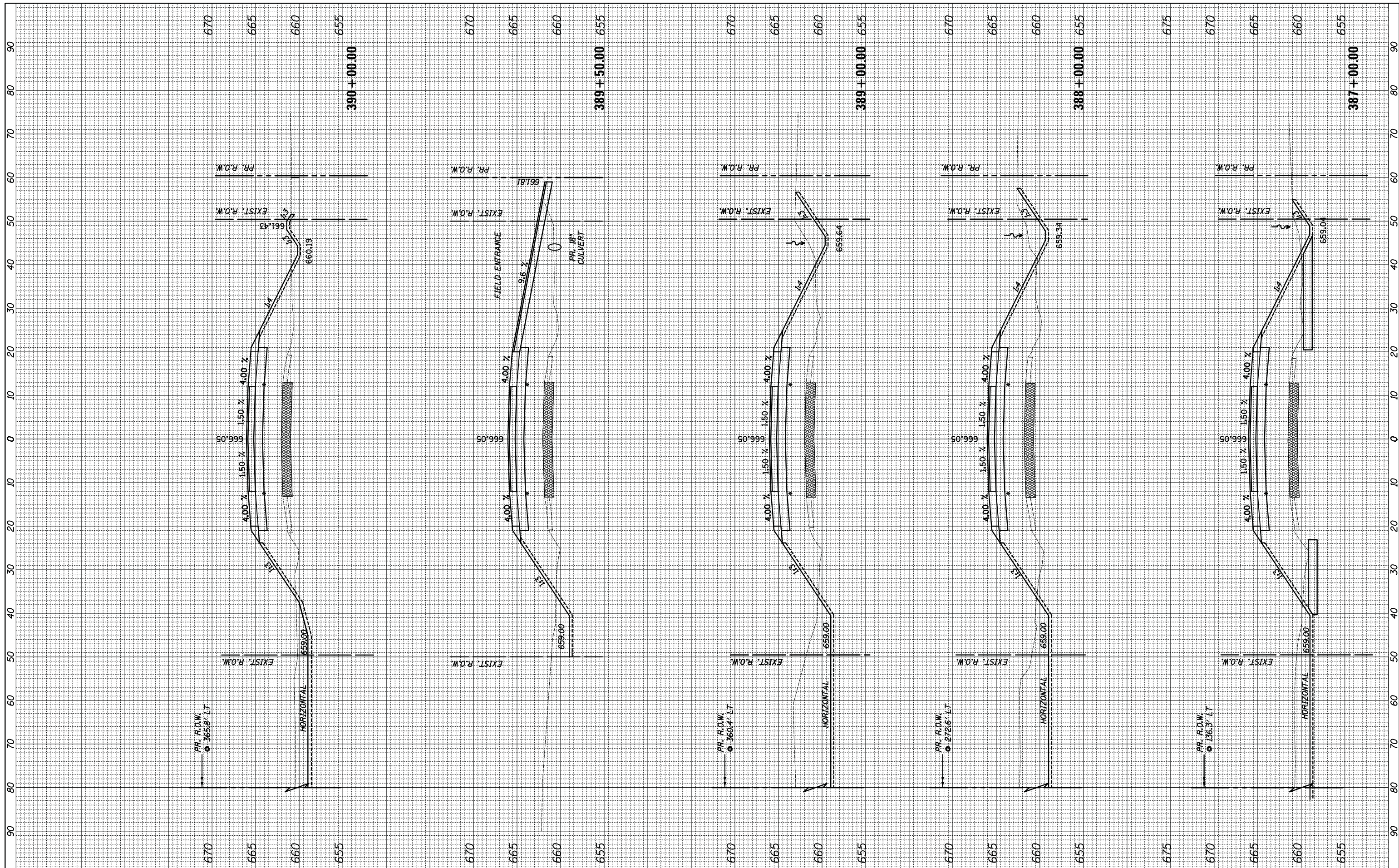
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS**
 SCALE: 10'H: 5'V SHEET 2 OF 17 SHEETS STA. 379+00.00 TO STA. 382+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	256
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
	TEMPLATE
	AREAS
	CHECKED



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

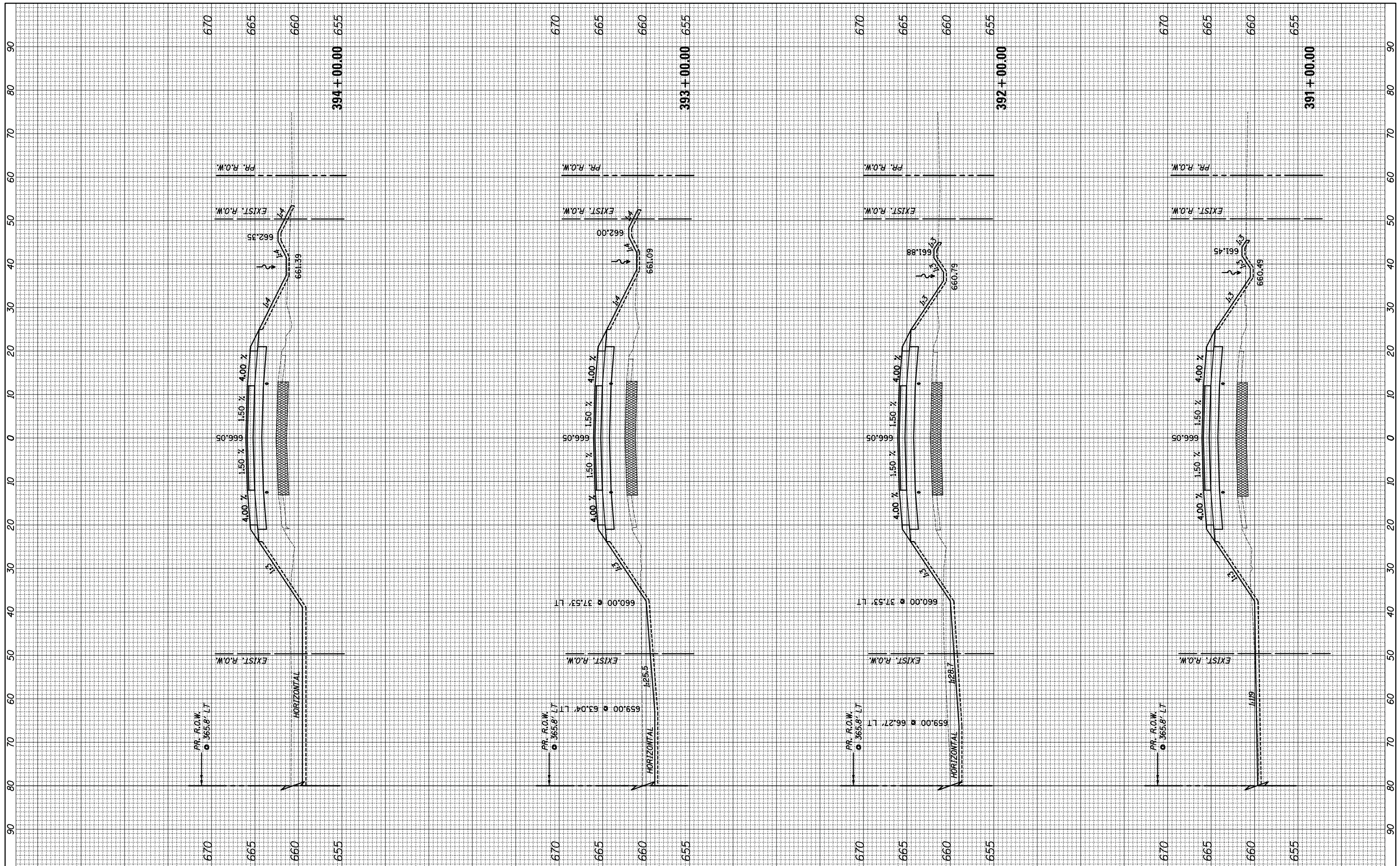
U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS

SCALE: 10'H: 5'V SHEET 4 OF 17 SHEETS STA. 387+00.00 TO STA. 390+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	258
CONTRACT NO. 60R52			ILLINOIS FED. AID PROJECT	

BY	DATE

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
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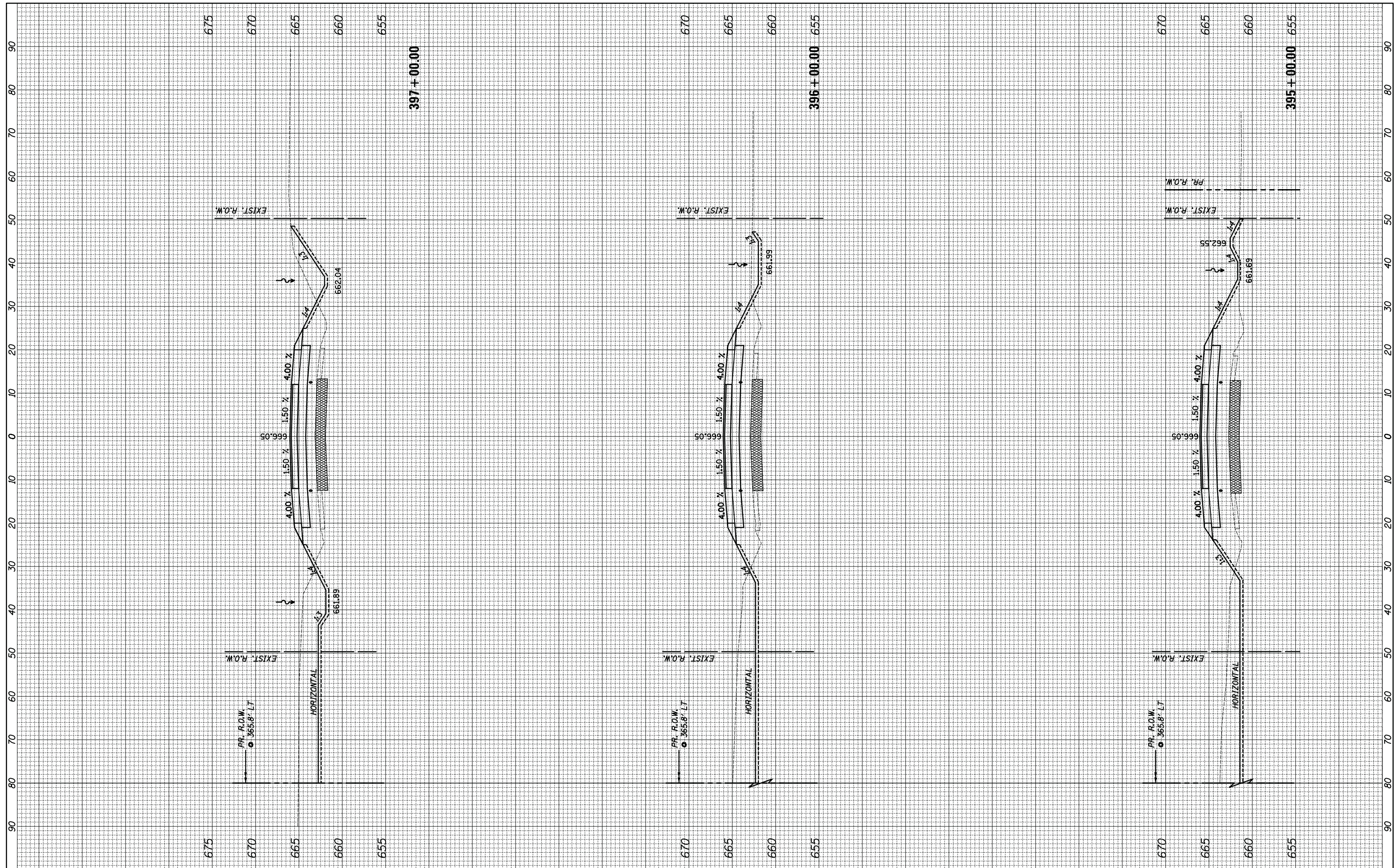
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS**
 SCALE: 10'H: 5'V SHEET 5 OF 17 SHEETS STA. 391+00.00 TO STA. 394+00.00

F.A.U. RTE. 297	SECTION 33B (B-R) & 33X-RS-2	COUNTY WILL	TOTAL SHEETS 275	SHEET NO. 259
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

BY	DATE
FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
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	AREAS CHECKED

BY	DATE
ORIGINAL SURVEY	SURVEYED
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

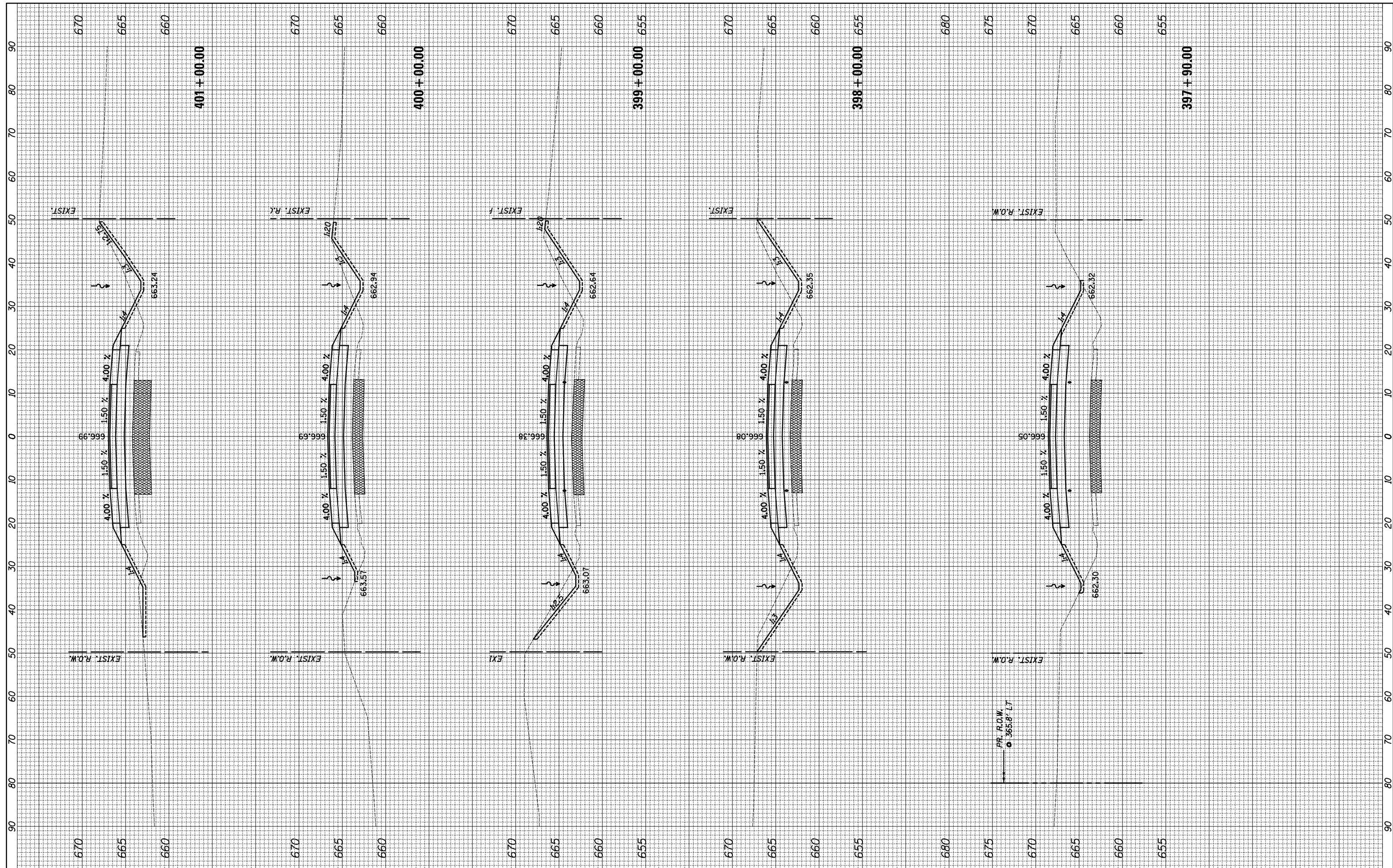
**U.S. ROUTE 6 OVER MARLEY CREEK
CROSS SECTIONS**

SCALE: 10'H: 5'V SHEET 6 OF 17 SHEETS STA. 395+00.00 TO STA. 397+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	260
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

BY	DATE

BY	DATE



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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

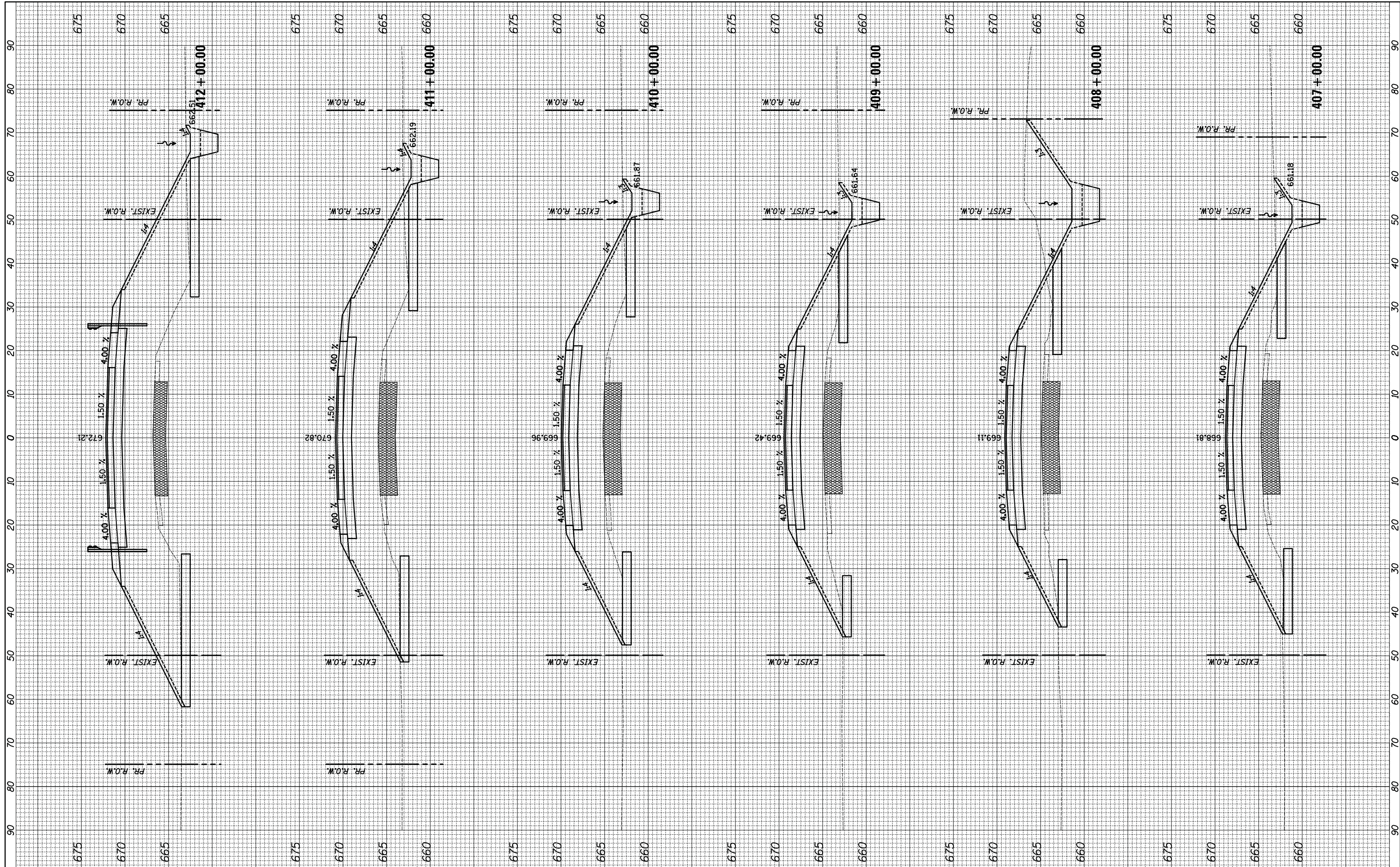
U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS

SCALE: 10'H: 5'V SHEET 7 OF 17 SHEETS STA. 397+90.00 TO STA. 401+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	261
				CONTRACT NO. 60R52
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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	AREAS
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

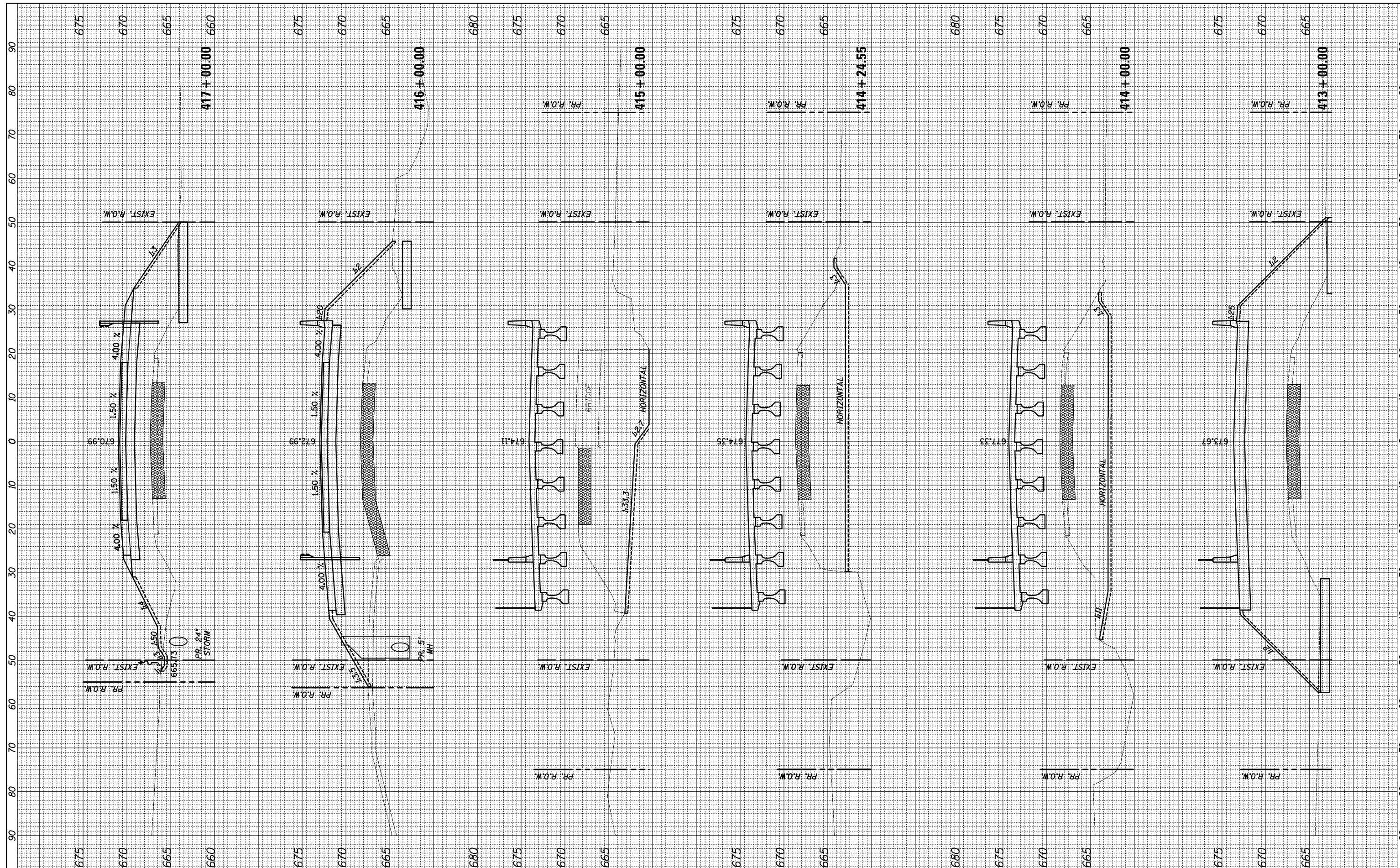
SCALE: 10'H: 5'V
 SHEET 9 OF 17 SHEETS
 STA. 407+00.00 TO STA. 412+00.00

U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	263
				CONTRACT NO. 60R52
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
	TEMPLATE
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS**

SCALE: 10'H: 5'V SHEET 10 OF 17 SHEETS STA. 413+00.00 TO STA. 417+00.00

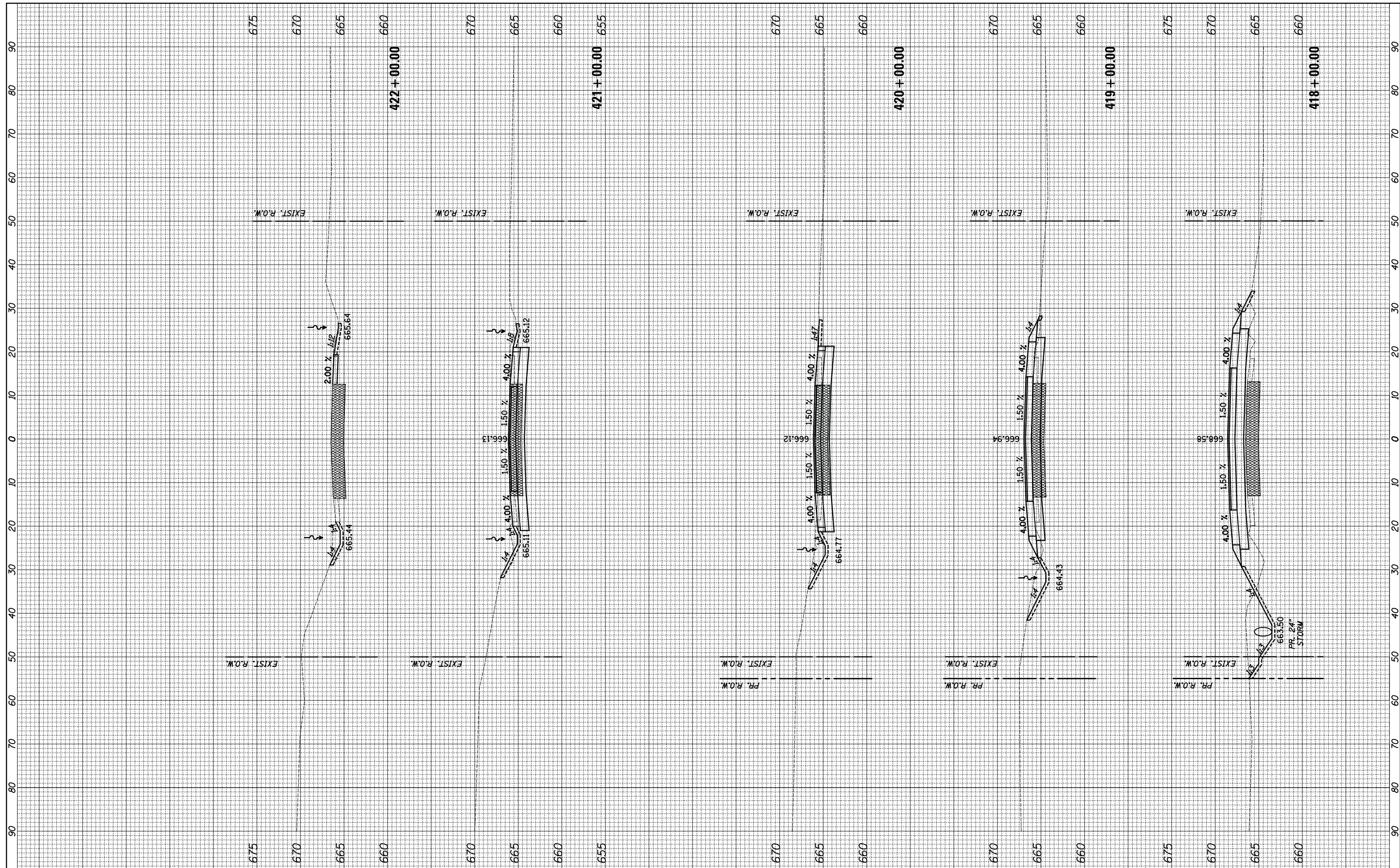
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	264

CONTRACT NO. 60R52

ILLINOIS FED. AID PROJECT

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

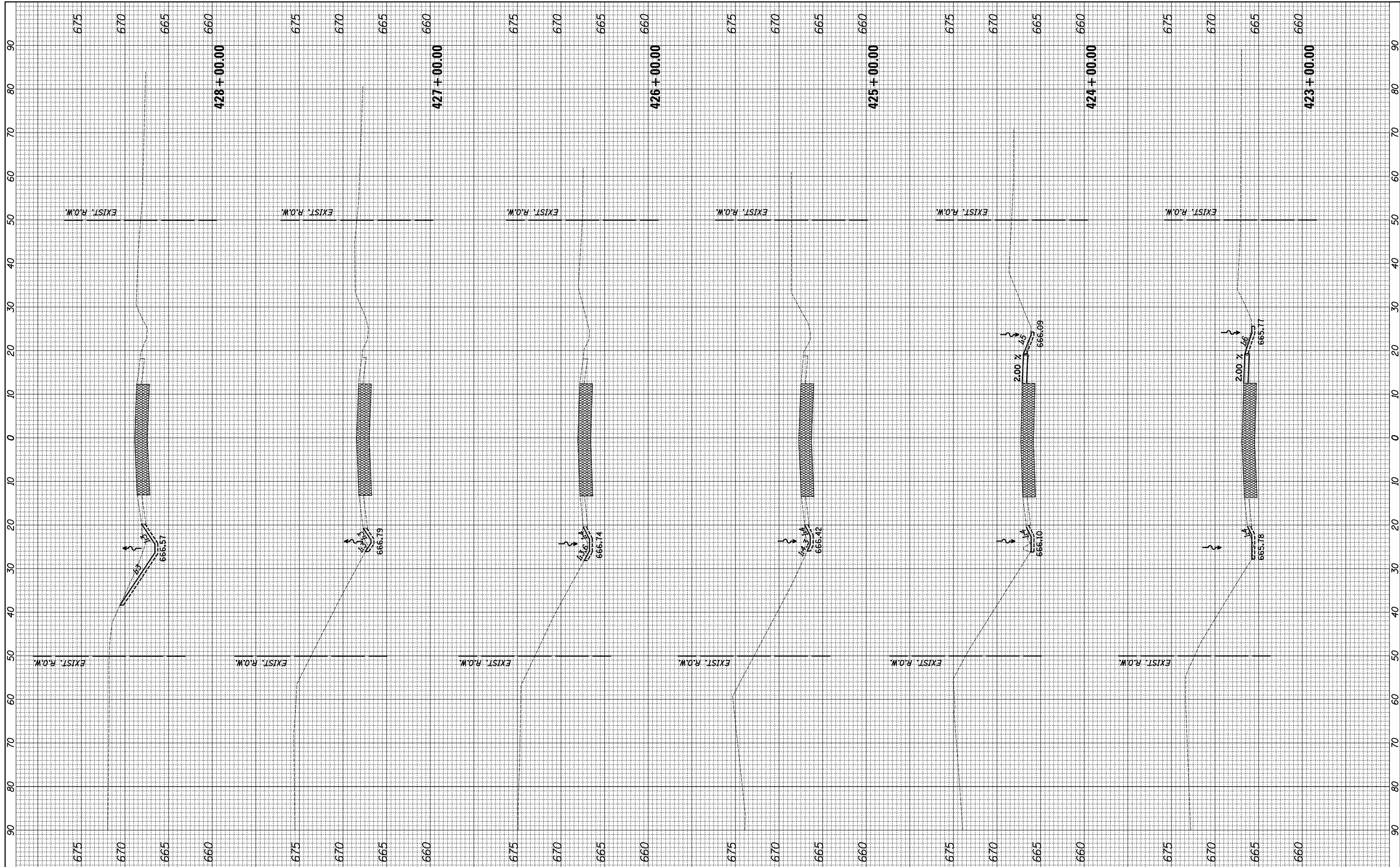
**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS**

SCALE: 10'H: 5'V SHEET 11 OF 17 SHEETS STA. 418+00.00 TO STA. 422+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	265
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

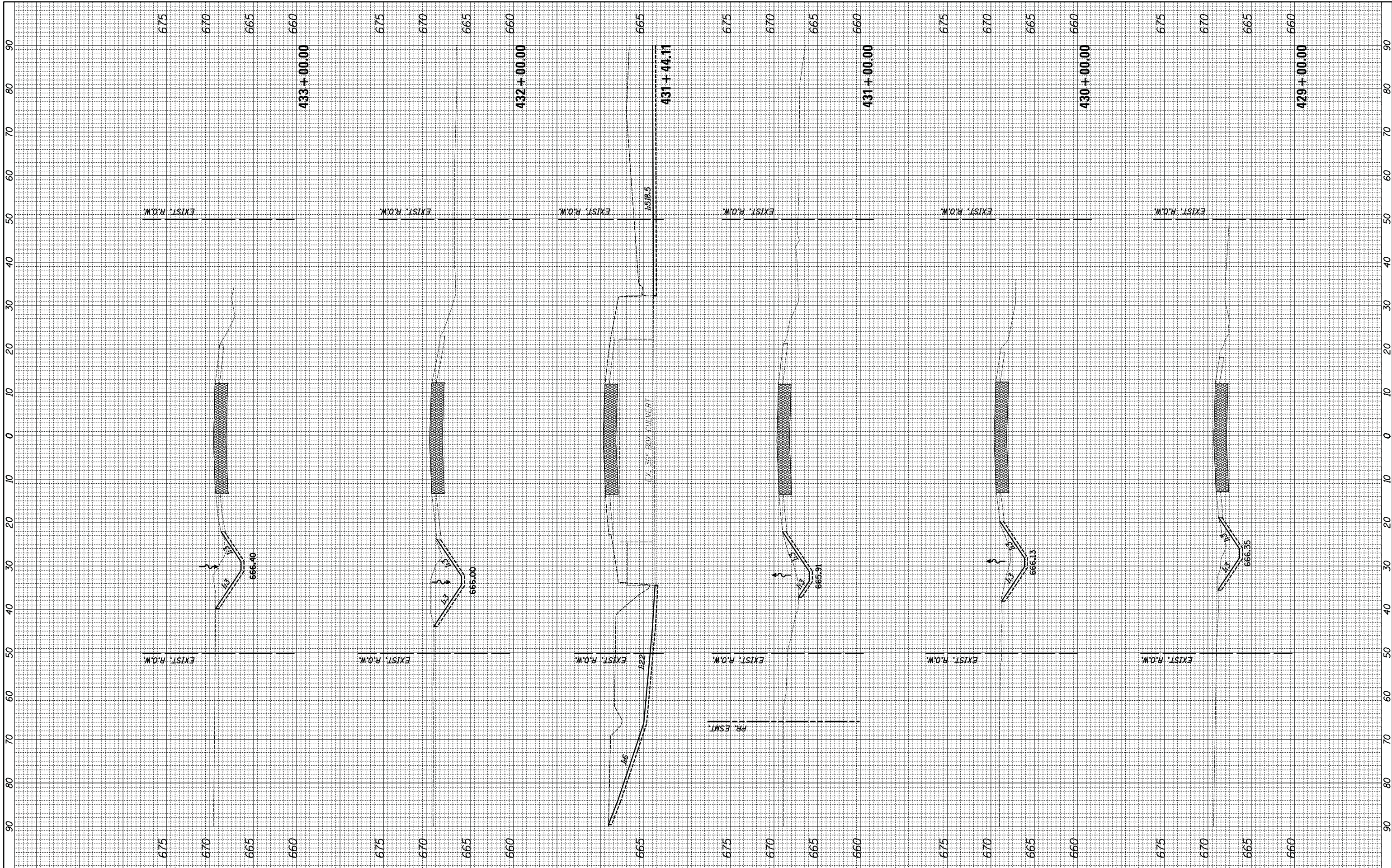
SCALE: 10'H: 5'V SHEET 12 OF 17 SHEETS STA. 423+00.00 TO STA. 428+00.00

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	266
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

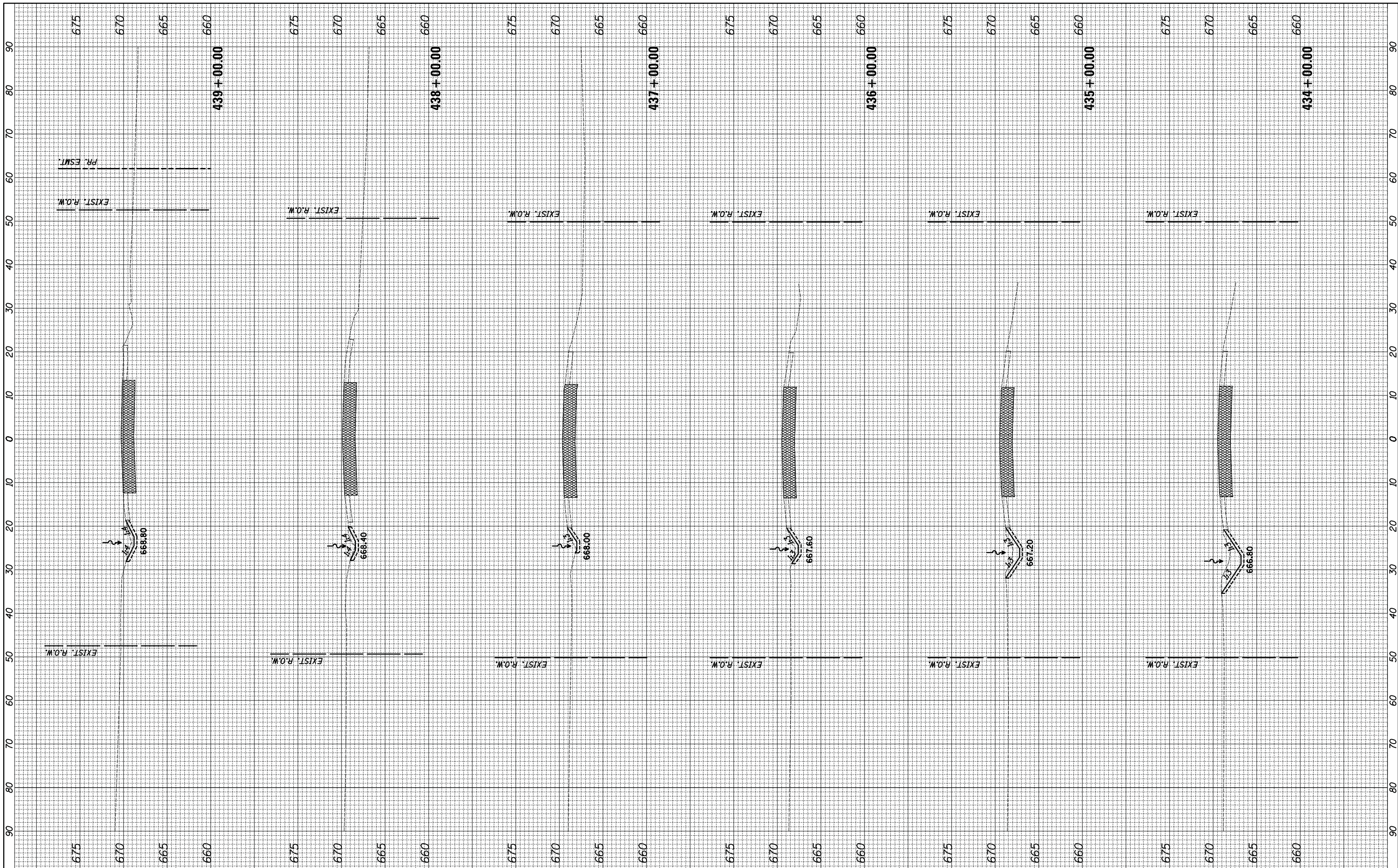
SCALE: 10'H: 5'V SHEET 13 OF 17 SHEETS STA. 429+00.00 TO STA. 433+00.00

**U.S. ROUTE 6 OVER MARLEY CREEK
CROSS SECTIONS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	267
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

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NOTE BOOK	TEMPLATE AREAS CHECKED
NO.	AREAS CHECKED



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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

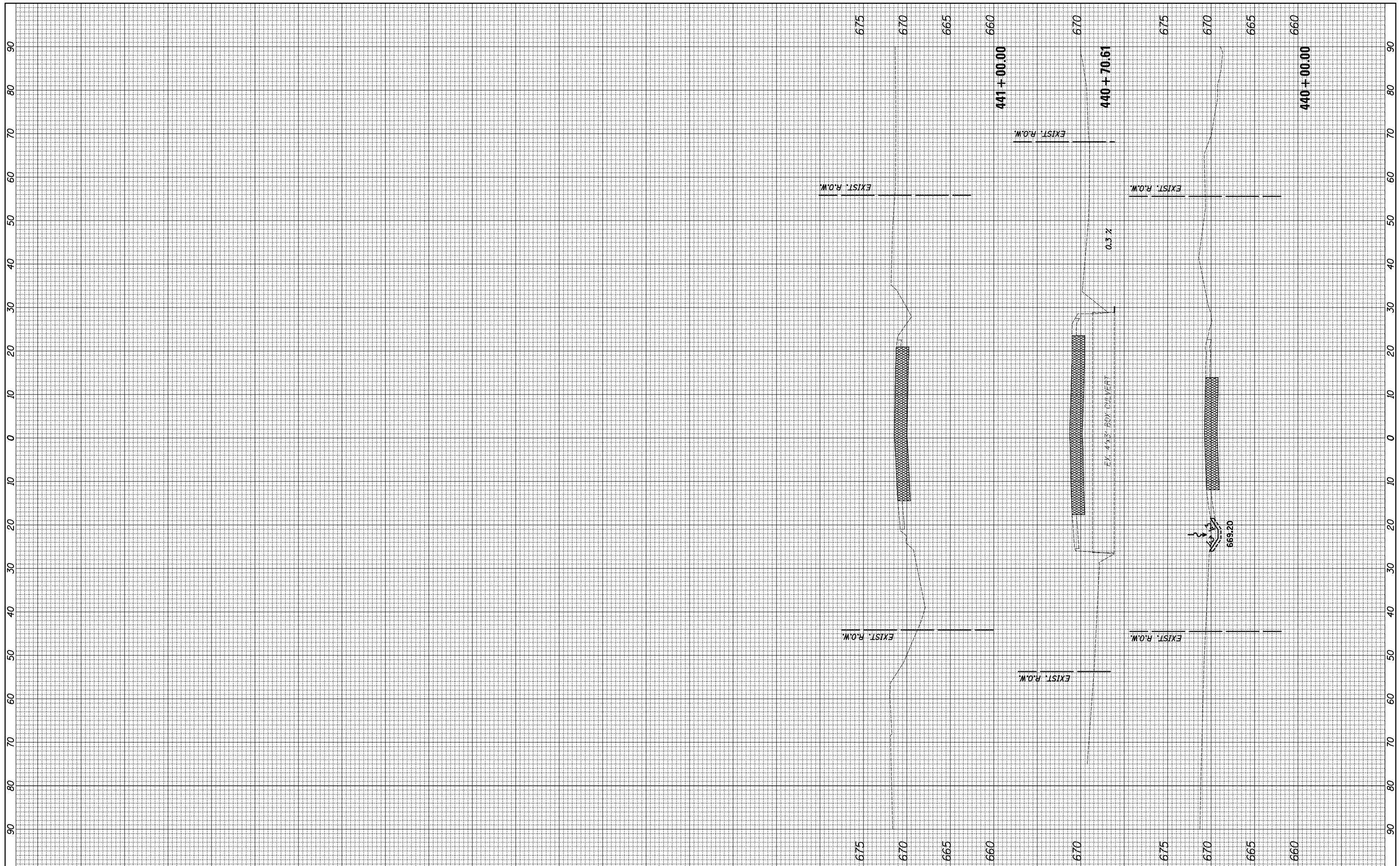
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 SHEET 14 OF 17 SHEETS
 STA. 434+00.00 TO STA. 439+00.00

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	268
			CONTRACT NO. 60R52	
ILLINOIS FED. AID PROJECT				

BY	DATE

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NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

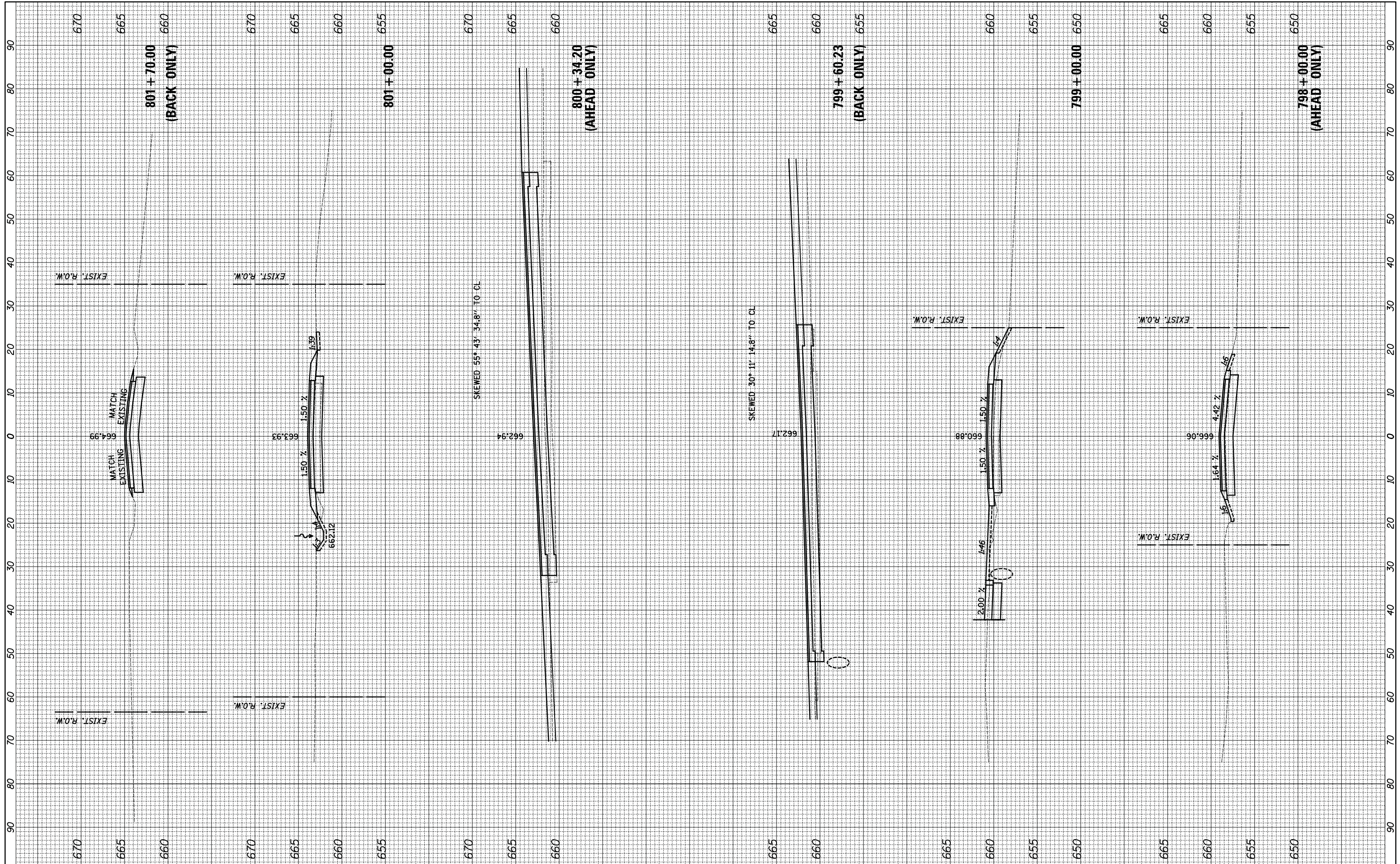
**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS**

SCALE: 10'H: 5'V SHEET 15 OF 17 SHEETS STA. 440+00.00 TO STA. 441+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	269
CONTRACT NO. 60R52				

FINL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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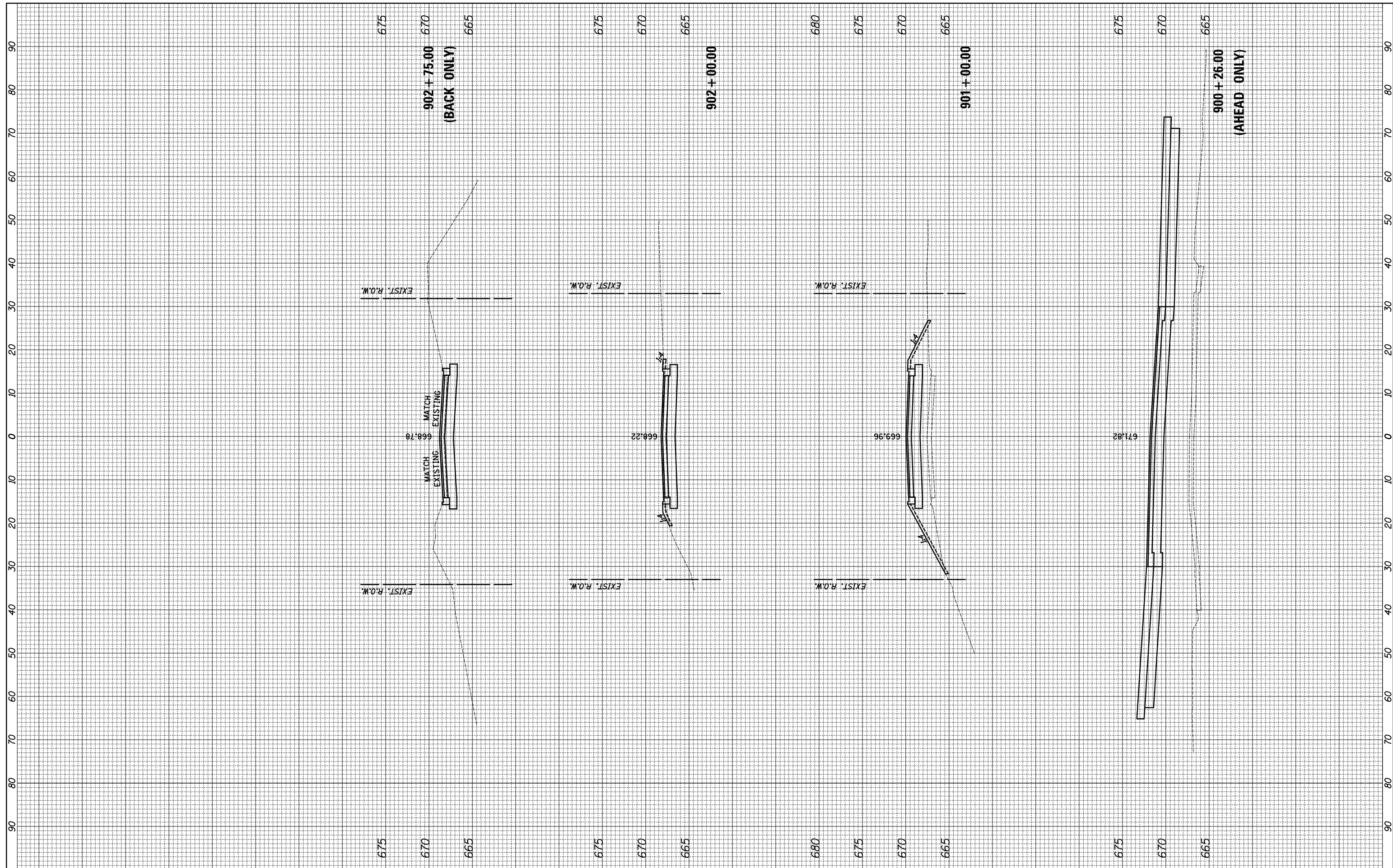
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS - HAAS ROAD**
 SCALE: 10'H: 5'V SHEET 16 OF 17 SHEETS STA. 798+00.00 TO STA. 807+70.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	270
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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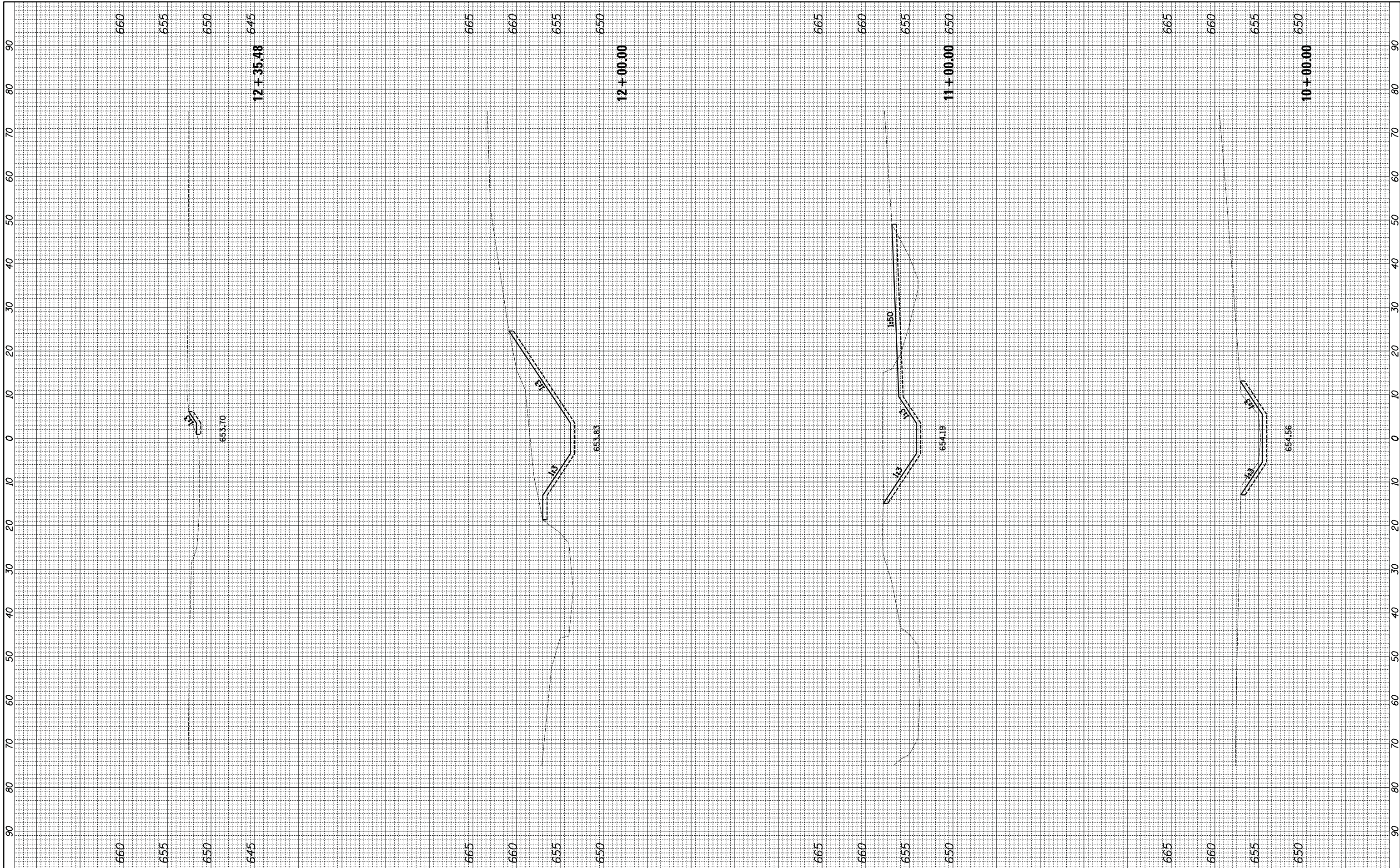
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS - SPRING MEADOWS DRIVE**
 SCALE: 10'H: 5'V SHEET 17 OF 17 SHEETS STA. 900+26.00 TO STA. 902+75.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	271
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE



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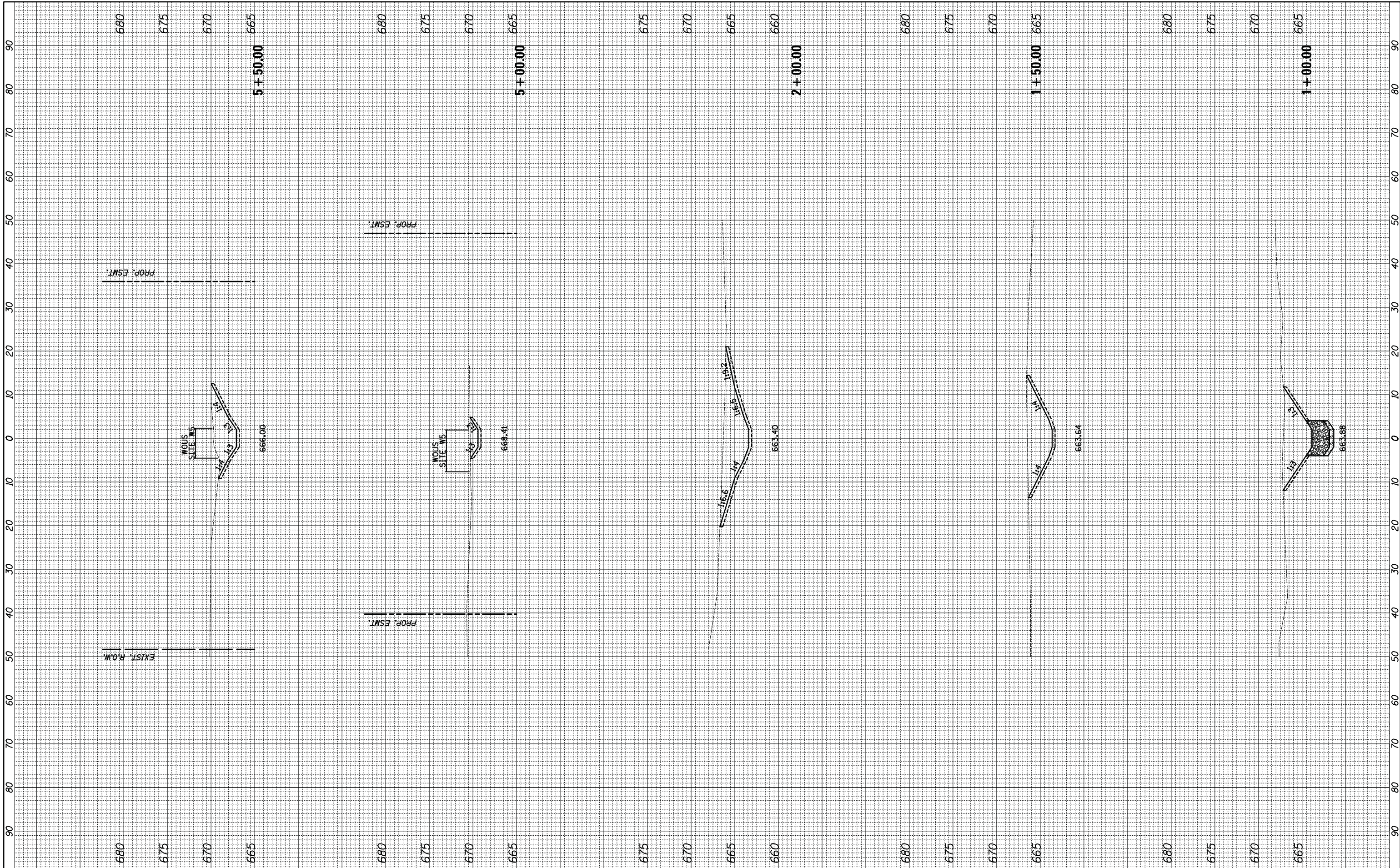
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
CROSS SECTIONS - CHANNEL AT STURCTURE SN 099-0149**
SCALE: 10'H: 5'V SHEET 1 OF 1 SHEETS STA. 10+00.00 TO STA. 12+35.48

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	272
CONTRACT NO. 60R52				

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



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PLOT SCALE = 10.0000' / in.
PLOT DATE = 1/31/2019

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

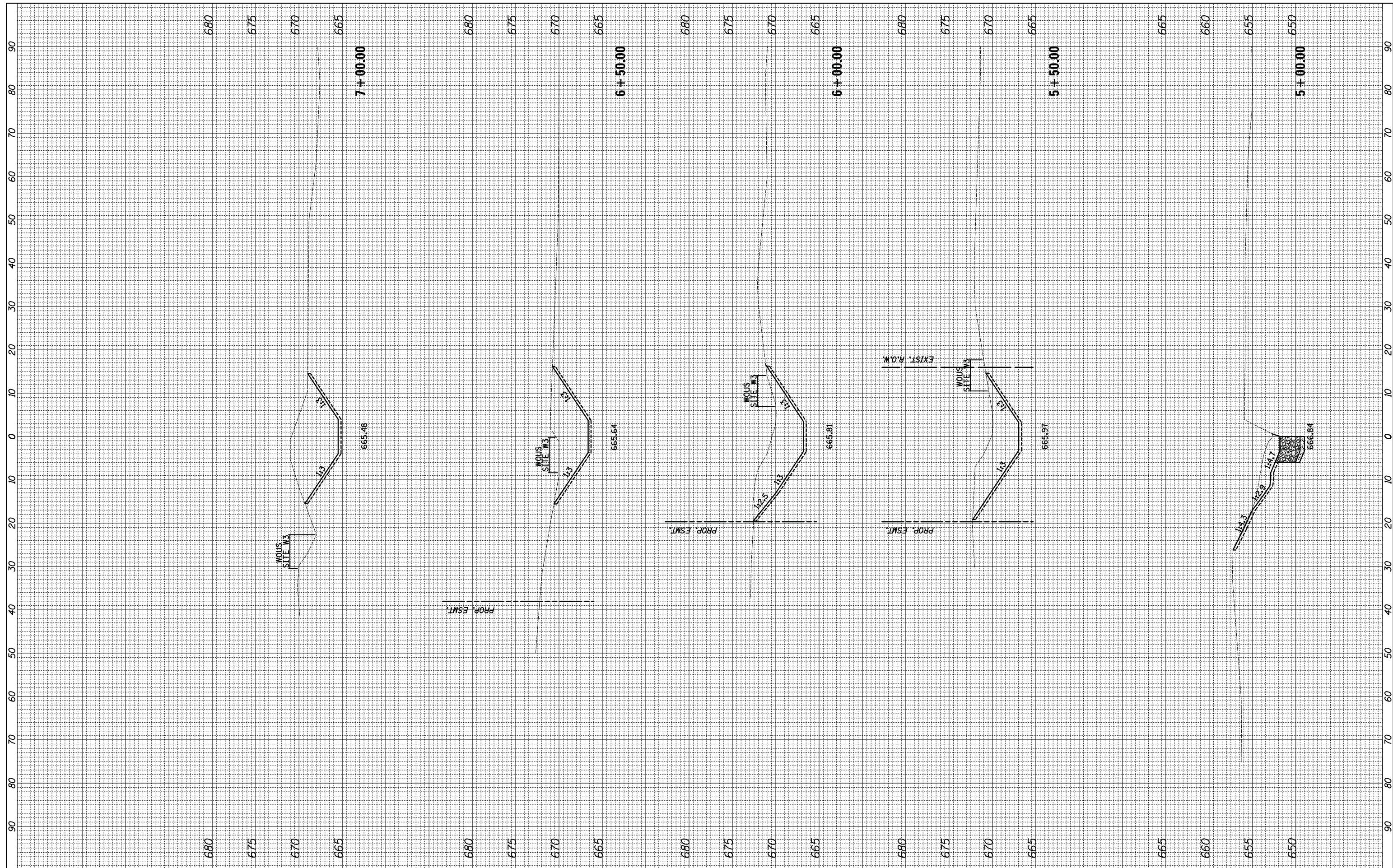
**U.S. ROUTE 6 OVER MARLEY CREEK
CROSS SECTIONS - CHANNEL AT CULVERT 431+50**

SCALE: 10'H: 5'V SHEET 1 OF 1 SHEETS STA. 1+00.00 TO STA. 5+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	273
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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 DATE -

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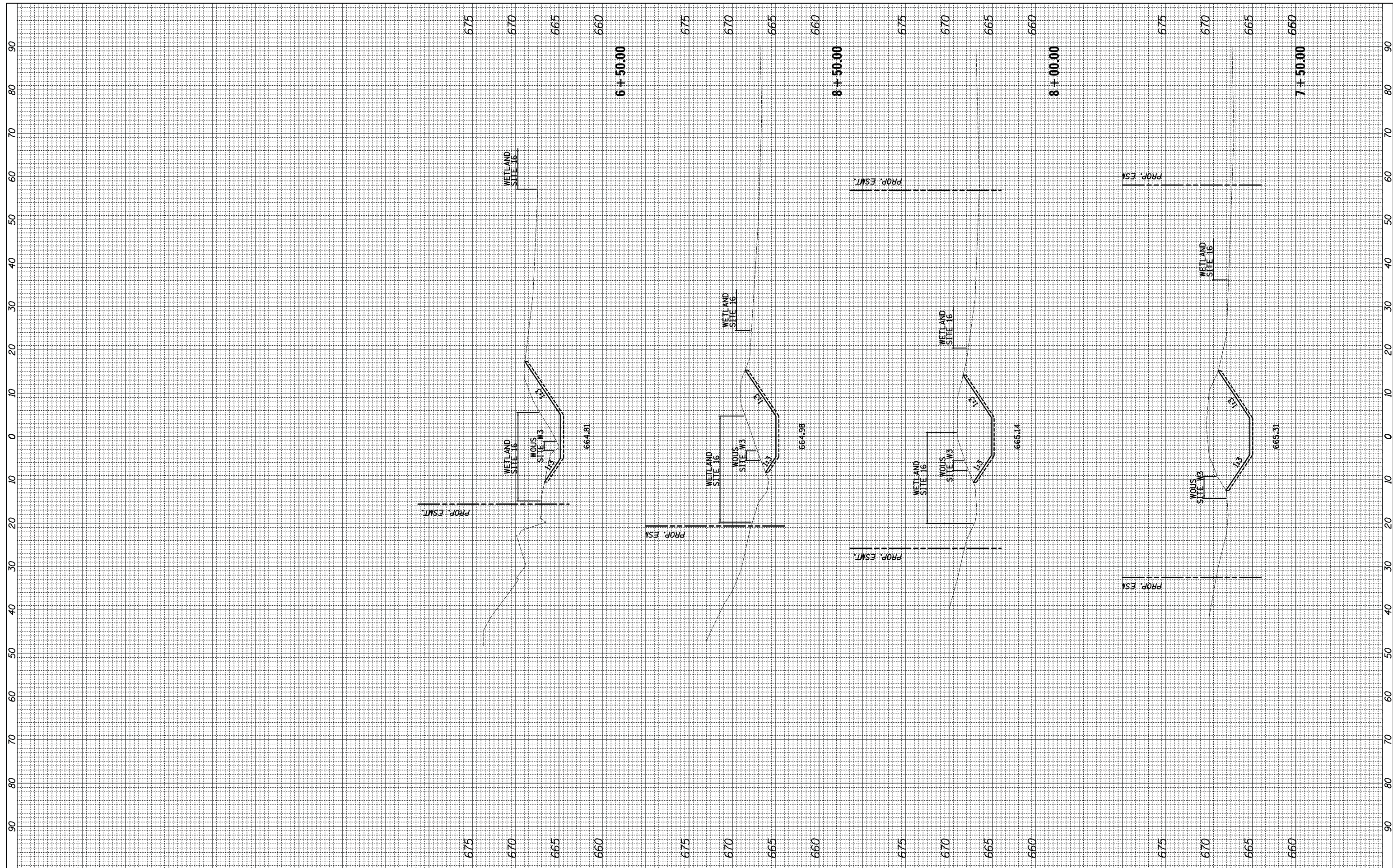
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS - CHANNEL AT CULVERT 440+70**
 SCALE: 10'H: 5'V SHEET 1 OF 2 SHEETS STA. 5+00.00 TO STA. 7+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	274
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				

BY	DATE

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CHECKED		



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DESIGNED -	REVISD -
DRAWN -	REVISD -
CHECKED -	REVISD -
DATE -	REVISD -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**U.S. ROUTE 6 OVER MARLEY CREEK
 CROSS SECTIONS - CHANNEL AT CULVERT 440 + 70**

SCALE: 10'H: 5'V SHEET 2 OF 2 SHEETS STA. 10+00.00 TO STA. 12+35.48

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
297	33B (B-R) & 33X-RS-2	WILL	275	275
CONTRACT NO. 60R52				
ILLINOIS FED. AID PROJECT				